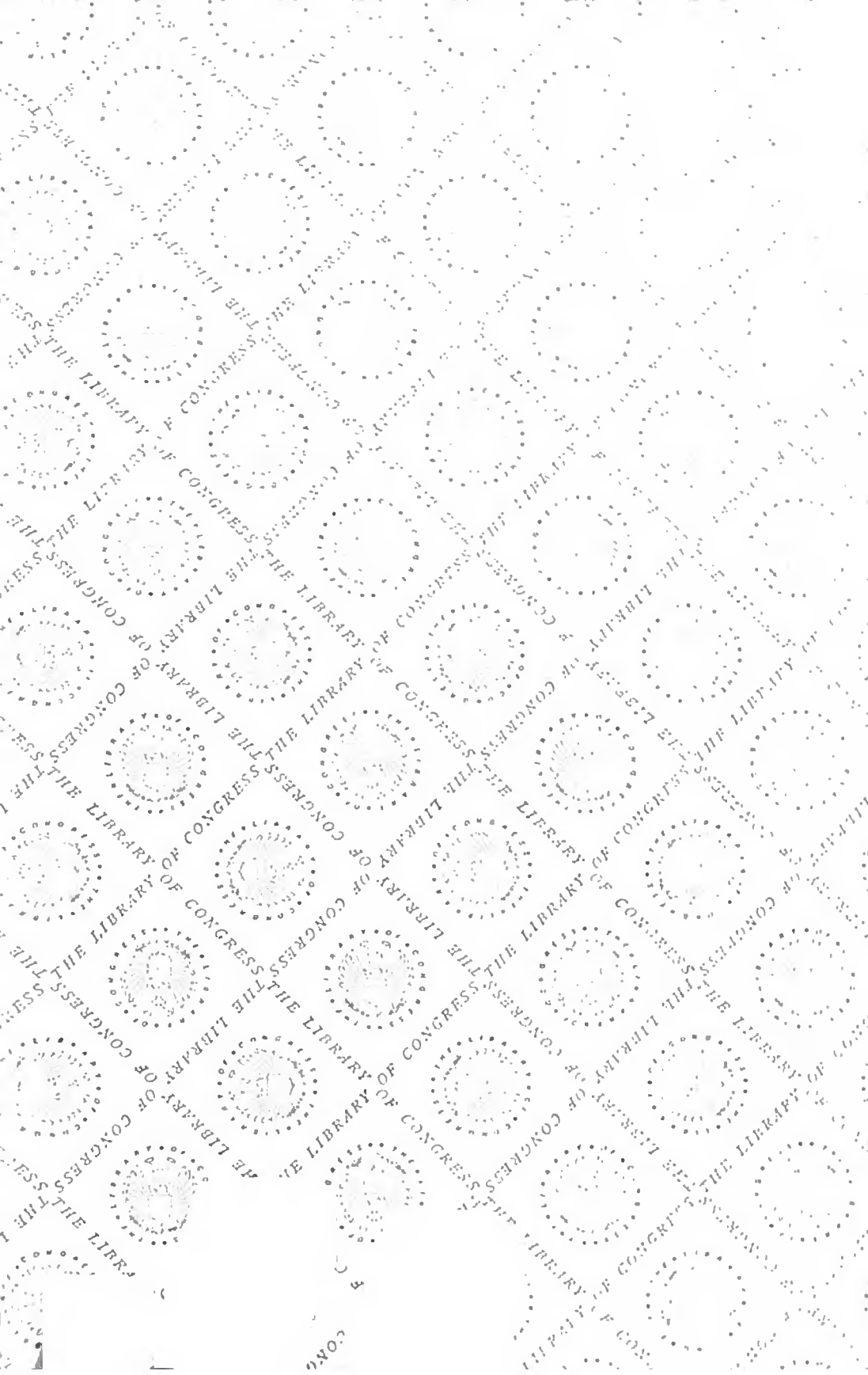


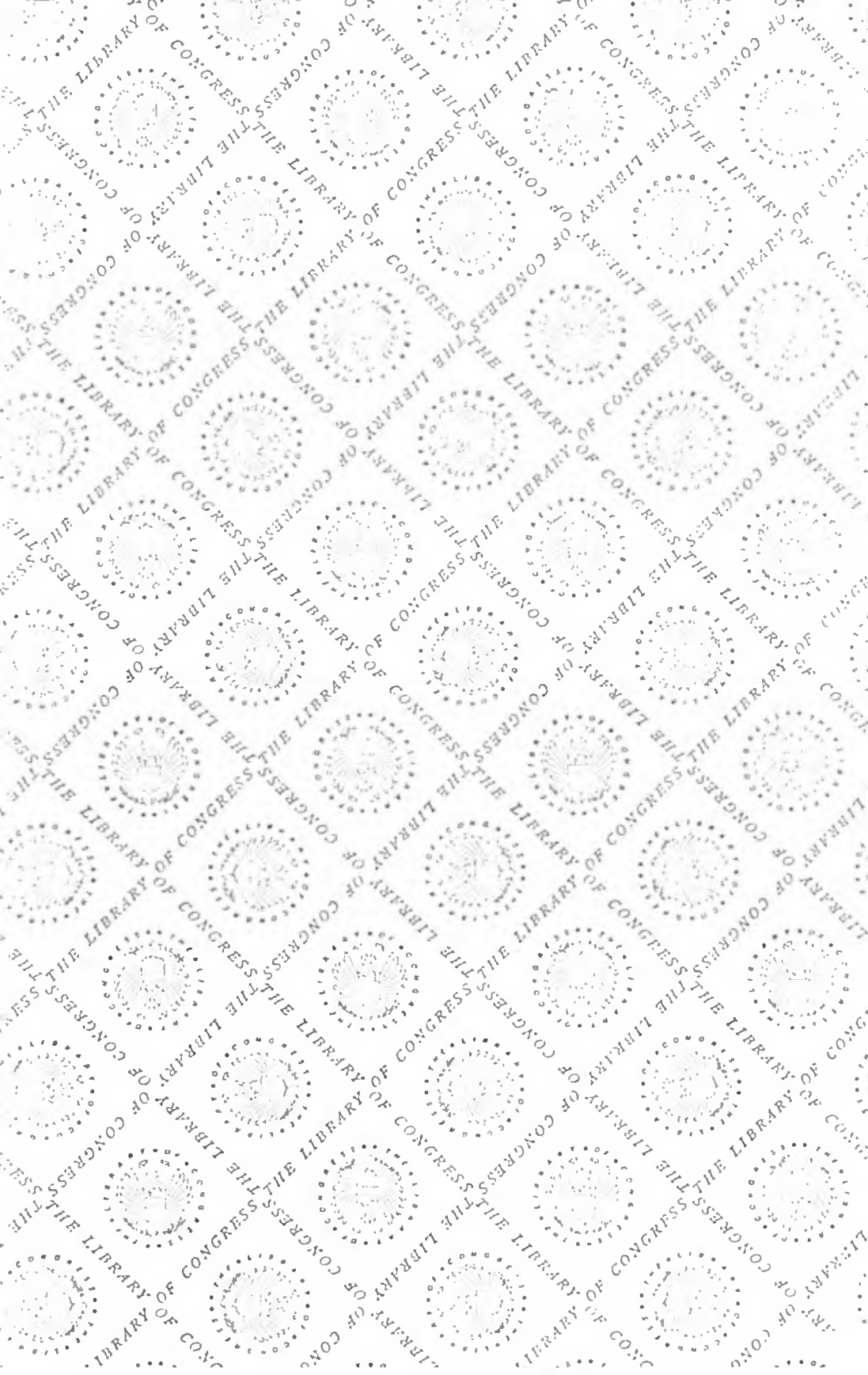
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# PUBLIC AND ALLIED HEALTH PERSONNEL

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HEARINGS

BEFORE THE

SUBCOMMITTEE ON

PUBLIC HEALTH AND ENVIRONMENT.

*United States Congress.* OF THE  
*House.*

COMMITTEE ON

INTERSTATE AND FOREIGN COMMERCE.

HOUSE OF REPRESENTATIVES

NINETY-THIRD CONGRESS

FIRST SESSION

ON

**H.R. 9341**

A BILL TO AMEND THE PUBLIC HEALTH SERVICE ACT TO ESTABLISH NEW PROGRAMS OF SUPPORT FOR THE TRAINING OF PUBLIC AND COMMUNITY HEALTH PERSONNEL AND TO REVISE THE PROGRAMS OF ASSISTANCE UNDER TITLE VII OF THAT ACT FOR THE TRAINING OF ALLIED HEALTH PERSONNEL, AND FOR OTHER PURPOSES

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JULY 24 AND 25, 1973

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**Serial No. 93-57**

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Printed for the use of the Committee on Interstate and Foreign Commerce



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## CONTENTS

	Page
Hearings held on—	
July 24, 1973.....	1
July 25, 1973.....	71
Text of H.R. 9341.....	2
Report of—	
Defense Department.....	21
Health, Education, and Welfare Department.....	22
Office of Management and Budget.....	22
Statement of—	
Andrews, Aaron L., dean, School of Allied Health, Ferris State College, Big Rapids, Mich., representing the Association of Schools of Allied Health Professions.....	71, 76
Bering, Nellie May, professor and chairman, Department of Medical Technology, College of Allied Health Professions, Temple Univer- sity, Philadelphia, Pa., representing American Society for Medical Technology.....	122
Breslow, Dr. Lester, president, Association of Schools of Public Health.....	90
Champion, John M., Ph. D., chairman, Program in Health and Hospital Administration, University of Florida, representing the Association of University Programs in Health Care Administration.....	103
Cotton, Ray, executive director, Association of Schools of Public Health.....	90
Edwards, Dr. Charles C., Assistant Secretary for Health, Department of Health, Education, and Welfare.....	23
Endicott, Dr. Kenneth M., Acting Director, Bureau of Health Re- sources Development, Health Resources Administration, Depart- ment of Health, Education, and Welfare.....	23
Filerman, Gary L., Ph. D., executive director, Association of Univer- sity Programs in Health Care Administration.....	103
Fletcher, Dr. Dean, in behalf of Health Planning and Education Associates.....	111
Hall, Dr. Thomas L., professor, University of North Carolina, School of Public Health, Chapel Hill, N.C.....	55, 62
Hamburg, Dr. Joseph, dean, College of Allied Health Professions, University of Kentucky, Lexington, Ky., representing the Associa- tion of Schools of Allied Health Professions.....	71, 72
Hatch, Thomas D., Director, Division of Allied Health Manpower, Bureau of Health Resources Development, Health Resources Administration, Department of Health, Education, and Welfare.....	23
Hepner, James O., Ph. D., director, Department of Health Care Administration, Washington University School of Medicine, St. Louis, Mo., representing the Association of University Programs in Health Care Administration.....	103
Laur, Robert J., Ph. D., Acting Administrator, Health Resources Administration, Department of Health, Education, and Welfare.....	23
Lundgren, Elizabeth, director, Division of Health Studies, Miami- Dade Community College, Miami, Fla., representing the Associa- tion of Schools of Allied Health Professions.....	71, 75
Miller, Dr. C. Arden, professor, University of North Carolina, School of Public Health, Department of Maternal and Child Health, Chapel Hill, N.C.....	55
Samuels, William M., executive director, Association of Schools of Allied Health Professions.....	71
Struve, Fred J., Jr., director, Governmental Relations, American Society for Medical Technology.....	122
Tarr, Ms. Linda Z., health specialist, American Federation of State, County, and Municipal Employees, AFL-CIO.....	114

101-74

Statement of—Continued	Page
Wegman, Dr. Myron, chairman, Committee on Governmental Relations, Association of Schools of Public Health.....	90
Zapp, Dr. John S., Deputy Assistant Secretary for Legislation (Health), Department of Health, Education, and Welfare.....	23
Additional material submitted for the record by—	
American Dental Association, American Dental Hygienists' Association, and the American Association of Dental Schools, statement..	126
American Federation of State, County, and Municipal Employees, attachment to Ms. Tarr's prepared statement, non-professionals and para-professionals in allied health manpower, July 24, 1973..	117
American Hospital Association, Leo J. Gehrig, M.D., vice president, letter dated July 27, 1973, to Chairman Rogers.....	139
American Nurses' Association, Inc., Rosamond C. Gabrielson, M.A., R.N., president, letter dated July 23, 1973, to Chairman Rogers....	141
American Occupational Therapy Association, statement.....	127
American Optometric Association, statement.....	130
American Society for Medical Technology, attachment to Miss Bering's prepared statement, ASMT position paper equivalency and proficiency.....	124
Association of American Medical Colleges, John A. D. Cooper, M.D., president, letter dated August 8, 1973, to Chairman Rogers.....	142
Association of Schools of Public Health, tables attached to Dr. Breslow's prepared statement:	
Table I—Enrollment and graduates, U.S. schools of public health, 1958-72.....	98
Table II—Estimated distribution by employment in 1972 of public health graduates from 1962 to 1972.....	99
Table III—Appropriations.....	99
Table IV—Students enrolled in schools of public health, fall term 1972—showing source of financial support.....	100
Association of University Programs in Health Administration, attachments to Mr. Filerman's prepared statement:	
Degrees granted in 1972—by emphasis.....	107
Master's degrees granted by AUPHA member and associate member programs, 1970, 1971, 1972.....	108
Section 791 A and B appropriations.....	109
George Washington University School of Medicine, Dr. James J. Feffer, and Rev. T. Byron Collins, S.J., Georgetown University Schools of Medicine and Dentistry, statement.....	137
Georgetown University of Schools of Medicine and Dentistry, Rev. T. Byron Collins, S.J., and Dr. James J. Feffer, George Washington University School of Medicine, statement.....	137
Health, Education, and Welfare Department:	
Comments on projected deficits in public health manpower by 1975 estimated in "Professional Health Manpower for Public Health," dated March 1, 1973.....	38
Number and types of students being trained in the first year of the AHEC programs.....	53
Interstate and Foreign Commerce Committee:	
Letter dated January 29, 1973, from Jerrold M. Michael, acting dean, University of Hawaii, School of Public Health, to Congresswoman Patsy T. Mink re effects the proposed 1974 budget will have on the Hawaii Public Health School.....	48
Letter dated April 24, 1973, from John R. Kernodle, M.D., chairman, board of trustees, American Medical Association, to Dr. B. G. Greenberg, dean, School of Public Health, University of North Carolina re AMA's position on the subject of categorical grants.....	54
National Environmental Health Association, Nicholas Pohlit, M.P.H., R.S., executive director, letter dated August 13, 1973, to Chairman Rogers.....	144
Wessman, Henry C., R.P.T., associate professor and chairman, Department of Physical Therapy, University of North Dakota, School of Medicine, Grand Forks, N. Dak., statement.....	131

## ORGANIZATIONS REPRESENTED AT THE HEARINGS

- American Federation of State, County and Municipal Employees, AFL-CIO,  
Ms. Linda Z. Tarr, health specialist.
- American Society for Medical Technology:  
Bering, Nellie May, professor and chairman, Department of Medical  
Technology, College of Allied Health Professions, Temple University,  
Philadelphia, Pa.
- Struve, Fred J., Jr., director, Governmental Relations.
- Association of Schools of Allied Health Professions:  
Andrews, Aaron L., dean, School of Allied Health, Ferris State College,  
Big Rapids, Mich.
- Hamburg, Dr. Joseph, dean, College of Allied Health Professions, Uni-  
versity of Kentucky, Lexington, Ky.
- Lundgren, Elizabeth, director, Division of Health, Studies, Miami-Dade  
Community College, Miami, Fla.
- Samuels, William M., executive director.
- Association of Schools of Public Health:  
Breslow, Dr. Lester, president.
- Cotton, Ray, executive director.
- Wegman, Dr. Myron, chairman, Committee on Governmental Relations.
- Association of University Programs in Health Care Administration:  
Champion, John M., Ph.D., chairman, Program in Health and Hospital  
Administration, University of Florida.
- Filerman, Gary L., Ph.D., executive director.
- Hepner, James O., Ph.D., director, Department of Health Care Ad-  
ministration, Washington University School of Medicine, St. Louis,  
Mo.
- Health, Education, and Welfare Department:  
Edwards, Dr. Charles C., Assistant Secretary for Health.
- Endicott, Dr. Kenneth M., Acting Director, Bureau of Health Resources  
Development, Health Resources Administration.
- Hatch, Thomas D., Director, Division of Allied Health Manpower,  
Bureau of Health Resources Development, Health Resources Ad-  
ministration.
- Laur, Robert J., Ph.D., Acting Administrator, Health Resources Ad-  
ministration.
- Zapp, Dr. John S. Deputy Assistant Secretary for Legislation (Health).
- Health Planning and Education Associates, Dr. Dean Fletcher.



## PUBLIC AND ALLIED HEALTH PERSONNEL

TUESDAY, JULY 24, 1973

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON PUBLIC HEALTH AND ENVIRONMENT,  
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,  
*Washington, D.C.*

The subcommittee met at 10 a.m., pursuant to notice, in room 2123, Rayburn House Office Building, Hon. Paul G. Rogers, chairman, presiding.

Mr. ROGERS. The subcommittee will come to order, please.

This morning's hearings are on H.R. 9341, a bill introduced by 10 of the 11 members of the Subcommittee on Public Health and Environment, entitled the "Public and Allied Health Personnel Act of 1973." This is the second of four bills the subcommittee will develop this year which will be intended to replace expiring authorities in the Public Health Service Act.

H.R. 9341 revises and extends authorities for two health programs, allied health and public health training, which would have expired at the end of fiscal year 1973 were not P.L. 93-45 enacted into law. This bill would have the effect of repealing existing authorities which provide assistance to schools and students of public health and allied health, as well as the training authority found in the comprehensive health planning legislation, and replace them with much more specific authorities.

This subcommittee does not extend legislation simply because it has been on the books for a number of years. In conducting hearings on the simple extension legislation, the subcommittee examined carefully arguments advanced to support termination of assistance to these schools and students. We examined arguments concerning basic educational opportunity grants, student loans, and the potential of alternative institutional support from State and Federal sources.

We found these arguments to be supported by no studies, and to be severely undermined by an examination of the programs proposed to become substitutes for existing programs of assistance in the public and allied health fields. We were provided no assurances that if these programs were terminated, schools of public and allied health would nevertheless remain open and needy students would nevertheless be afforded financial access to these schools and programs.

I will at this point reiterate the request to the administration that was made with respect to the decision to revoke training grant authority for biomedical research: please produce for the committee competent studies which indicate that assistance in these areas is unnecessary. If such studies are produced, then the subcommittee will be able to consider HEW's recommendation to terminate programs very carefully. If such studies are not forthcoming, then we are obligated to conduct our own study through public hearings, and draw our own conclusions.

[The text of H.R. 9341 and agency reports thereon follow:]

93d CONGRESS  
1st Session

# H. R. 9341

## IN THE HOUSE OF REPRESENTATIVES

JULY 17, 1973

Mr. ROGERS (for himself, Mr. SATTERFIELD, Mr. KYROS, Mr. PREYER, Mr. SYMINGTON, Mr. ROY, Mr. CARTER, Mr. HASTINGS, Mr. HEINZ, and Mr. HUDNUT) introduced the following bill; which was referred to the Committee on Interstate and Foreign Commerce

## A BILL

To amend the Public Health Service Act to establish new programs of support for the training of public and community health personnel and to revise the programs of assistance under title VII of that Act for the training of allied health personnel, and for other purposes.

1. *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

### 3 SHORT TITLE

4 SECTION 1. This Act may be cited as the "Public and  
5 Allied Health Personnel Act of 1973".

I



1       PROGRAMS OF ASSISTANCE FOR TRAINING OF  
 2       PUBLIC AND COMMUNITY HEALTH  
 3       PERSONNEL AND ALLIED HEALTH PERSONNEL

4       SEC. 2. (a) Part G of title VII of the Public Health  
 5       Service Act is amended to read as follows:

6       "PART G—TRAINING PROGRAMS FOR PUBLIC AND  
 7       COMMUNITY HEALTH PERSONNEL AND ALLIED HEALTH  
 8       PERSONNEL

9       "Subpart 1—Public and Community Health Personnel

10       "DEFINITION

11       "SEC. 790. For purposes of this subpart, the term 'pub-  
 12       lic and community health personnel' means individuals who  
 13       are engaged in—

14       "(1) the planning, development, or management of  
 15       medical care;

16       "(2) research on medical care development and  
 17       analysis of health statistics and other data,

18       "(3) the development and improvement of individ-  
 19       ual and community knowledge of health and the health  
 20       system, or

21       "(4) the development of a healthful environment  
 22       and control of environmental health hazards.

23       "PROJECT GRANTS AND CONTRACTS

24       "SEC. 791A. (a) The Secretary may make grants and  
 25       enter into contracts to assist eligible entities in meeting the

1 costs of development, demonstration, study, or experimenta-  
2 tion projects undertaken with respect to one or more of the  
3 following:

4       “(1) Methods of providing graduate education for  
5 public and community health personnel.

6       “(2) Methods of providing short-term and contin-  
7 uing education for public and community health person-  
8 nel.

9       “(3) Model curricula for the education of pub-  
10 lic and community health personnel.

11       “(4) Curricula and methods for the education or  
12 training of individuals who will plan, study, or manage  
13 the various components of the medical care system.

14       “(5) The utilization of equivalency and proficiency  
15 examinations as a method for determining compliance  
16 with licensure and certification requirements for public  
17 and community health personnel.

18       “(6) The accreditation of educational or training  
19 programs for health planning.

20       “(7) Programs which maximize, for economically  
21 or culturally deprived individuals, opportunities for ca-  
22 rers and advancement in public and community health.

23       “(8) Methods of providing persons trained in non-  
24 health disciplines short-term training in public and  
25 community health.

1       “(b) (1) No grant may be made or contract entered into  
2 under subsection (a) unless an application therefor has been  
3 submitted to, and approved by, the Secretary. Such applica-  
4 tion shall be in such form, submitted in such manner, and  
5 contain such information, as the Secretary shall by regulation  
6 prescribe. The Secretary shall give special consideration to  
7 applications for projects (or categories of projects) which  
8 are concerned with public and community health personnel  
9 for which there is the greatest national need (as determined  
10 in accordance with regulations prescribed by the Secretary).

11       “(2) For purposes of subsection (a), the term ‘eligible  
12 entities’ means those entities which have had an application  
13 approved under paragraph (1) and which are—

14               “(A) public or nonprofit private graduate schools  
15 of public health, hospital administration, or health plan-  
16 ning, or other public or nonprofit private entities granting  
17 graduate degrees in fields of public and community  
18 health; or

19               “(B) other public or nonprofit private health or  
20 educational entities which have arrangements (meeting  
21 such requirements as the Secretary shall by regulation  
22 prescribe) with an entity described in subparagraph  
23 (A).

24       “(3) Contracts may be entered into under subsection

1 (a) without regard to sections 3648 and 3709 of the Re-  
2 vised Statutes (31 U.S.C. 529; 41 U.S.C. 5).

3 “(4) The amount of any grant under subsection (a)  
4 shall be determined by the Secretary. Payments under such  
5 grants may be made in advance or by way of reimbursement,  
6 and at such intervals and on such conditions, as the Secre-  
7 tary finds necessary.

8 “(c) No grant may be made or contract entered into  
9 under subsection (a) for a project for which a grant may  
10 be made under section 791B.

11 “INSTITUTIONAL GRANTS

12 “SEC. 791B. (a) For the purpose of supporting grad-  
13 uate educational programs for public and community health  
14 personnel, the Secretary shall make grants to (A) public  
15 or nonprofit private graduate schools of public health ac-  
16 credited by a recognized body or bodies approved for such  
17 purpose by the Commissioner of Education, and (B) public  
18 or nonprofit private educational entities with graduate pro-  
19 grams in health administration or health planning which  
20 programs have each been accredited by a recognized body  
21 or bodies approved for such purpose by the Commissioner  
22 of Education.

23 “(b) (1) No grant may be made under subsection (a)

1 unless an application therefor has been submitted to, and  
2 approved by, the Secretary.

3 “(2) An application for a grant under subsection (a)  
4 shall be in such form, and submitted in such manner, as the  
5 Secretary shall by regulation prescribe, and shall contain—

6 “(A) assurances satisfactory to the Secretary that  
7 in each academic year (as such year is defined in regula-  
8 tions of the Secretary) for which the applicant receives a  
9 grant under subsection (a), at least twenty-five individ-  
10 uals will (i) in the case of schools of public health, com-  
11 plete the graduate educational programs of the applicant,  
12 or (ii) in the case of other educational entities, complete  
13 the graduated educational programs of the entity for  
14 which the application is submitted;

15 “(B) such assurances as the Secretary shall by  
16 regulation prescribe respecting one or more of the fol-  
17 lowing: Increases in overall enrollment, increases in  
18 enrollment of needed types of students, and increases in  
19 enrollment in programs for needed types of public and  
20 community health personnel; and

21 “(C) such other information as the Secretary may  
22 by regulation prescribe.

23 “(4) The Secretary may not approve an application  
24 submitted under this subsection unless he determines that the  
25 program for which the application was submitted meets such

1 quality standards as the Secretary shall by regulation pre-  
2 scribe.

3       “(5) The amount of any grant under subsection (a)  
4 shall be determined by the Secretary; but in determining  
5 the amount of any such grant, the Secretary shall take into  
6 account the number of individuals that will participate in the  
7 programs which will be supported by the grant and the  
8 need (as determined by the Secretary) for the types of pub-  
9 lic and community health personnel who will participate in  
10 such programs. Payments under any such grant may be made  
11 in advance or by way of reimbursement, and at such intervals  
12 and on such conditions, as the Secretary finds necessary.

13       “(e) No grant may be made under this section for a  
14 program for which a grant may be made under section  
15 791A.

16       “AUTHORIZATION OF APPROPRIATIONS FOR SPECIAL PROJ-  
17       ECT GRANTS AND CONTRACTS AND INSTITUTIONAL  
18       GRANTS

19       “SEC. 791C. (a) There is authorized to be appropriated  
20 \$20,000,000 for the fiscal year ending June 30, 1974, for  
21 payments under grants and contracts under section 791A  
22 and grants under section 791B.

23       “(b) Of the amounts appropriated under subsection (a)  
24 for the fiscal year ending June 30, 1974, not less than 60  
25 per centum of such amounts shall be used by the Secretary

1 to make grants for such fiscal year under section 791B, and  
2 not less than 20 per centum of such amounts shall be used  
3 by the Secretary to make grants and contracts for such fiscal  
4 year under section 791A. Of the amounts required by the  
5 preceding sentence to be used by the Secretary for grants  
6 under section 791B for such fiscal year, not less than—

7 “(i) 75 per centum of such amounts, or

8 “(ii) \$7,000,000,

9 whichever is greater, shall be used for grants to schools of  
10 public health.

#### 11 “TRAINEESHIPS

12 “Sec. 792. (a) The Secretary shall (1) establish and  
13 maintain traineeships in the Department of Health, Educa-  
14 tion, and Welfare to train individuals to perform public and  
15 community health services for which the Secretary de-  
16 termines there is unusual need, and (2) make grants to pub-  
17 lic or nonprofit private entities for traineeships to provide  
18 such training.

19 “(b) (1) No traineeship may be awarded by the Secre-  
20 tary under subsection (a) (1) to any individual unless the  
21 individual has submitted to the Secretary an application  
22 therefor and the Secretary has approved the application. The  
23 application shall be in such form, be submitted in such man-  
24 ner, and contain such information, as the Secretary by regu-  
25 lation may prescribe.

1       “(2) No grant for traineeships may be made under sub-  
2 section (a) (2) unless an application therefor has been sub-  
3 mitted to, and approved by, the Secretary. Such application  
4 shall be in such form, be submitted in such manner, and  
5 contain such information, as the Secretary by regulation may  
6 prescribe. Traineeships under such a grant shall be awarded  
7 in accordance with such regulations as the Secretary shall  
8 prescribe. The amount of any such grant shall be determined  
9 by the Secretary and payments under such a grant may be  
10 made in advance or by way of reimbursement and at such  
11 intervals and on such conditions as the Secretary finds  
12 necessary.

13       “(3) Traineeships awarded under subsection (a) (and  
14 under grants made thereunder) shall provide for such sti-  
15 pends and allowances (including travel and subsistence ex-  
16 penses and dependency allowances) for the trainees as the  
17 Secretary may deem necessary.

18       “(c) For the purposes of making payments under grants  
19 under subsection (a) (2), there is authorized to be appro-  
20 priated \$12,000,000 for the fiscal year ending June 30, 1974.

21               “STATISTICS AND ANNUAL REPORT

22       “SEC. 793. (a) The Secretary shall continuously de-  
23 velop, publish, and disseminate on a nationwide basis sta-  
24 tistics and other information respecting public and com-  
25 munity health personnel, including—



1           “(1) detailed descriptions of the various types of  
2   activities in which public and community health per-  
3   sonnel are engaged,

4           “(2) the current and anticipated needs for the  
5   various types of public and community health personnel,  
6   and

7           “(3) the number, employment, geographic loca-  
8   tions, salaries, and surpluses and shortages of public  
9   and community health personnel, the educational and  
10   licensure requirements for the various types of such per-  
11   sonnel, and the cost of training such personnel.

12          “(b) The Secretary shall submit annually to the Com-  
13   mittee on Interstate and Foreign Commerce of the House of  
14   Representatives and to the Committee on Labor and Public  
15   Welfare of the Senate a report on—

16           “(1) the statistics and other information devel-  
17   oped pursuant to subsection (a) ; and

18           “(2) the activities conducted under this subpart, in-  
19   cluding an evaluation of such activities.

20   Such report shall contain such recommendations for legisla-  
21   tion as the Secretary determines is needed to improve the  
22   programs authorized under this subpart. The Office of Man-  
23   agement and Budget may review such report before its  
24   submission to Congress, but the Office may not revise the  
25   report or delay its submission beyond the date prescribed

1 for its submission and may submit to Congress its comments  
2 respecting such report. The first report under this subsection  
3 shall be submitted not later than September 1, 1974.

4 "SUBPART 2—ALLIED HEALTH PERSONNEL

5 "DEFINITION

6 "SEC. 794. For purposes of this subpart, the term  
7 'allied health personnel' means individuals with training  
8 and responsibilities for (1) supporting, complementing, or  
9 supplementing the professional functions of physicians, den-  
10 tists, and other health professionals in the delivery of health  
11 care to patients, or (2) assisting environmental engineers  
12 and other personnel in environmental health control activities.

13 "PROJECT GRANTS AND CONTRACTS

14 "SEC. 795. (a) The Secretary may make grants and  
15 enter into contracts to assist eligible entities in meeting the  
16 costs of planning, study, development, demonstration, and  
17 evaluation projects undertaken with respect to one or more  
18 of the following:

19 "(1) Methods of coordination, management, and  
20 articulation of education and training at various levels  
21 for allied health personnel within and among educational  
22 institutions and their clinical affiliates.

23 "(2) Methods and techniques for State and regional  
24 coordination and monitoring of education and training  
25 for allied health personnel.

1           “(3) Programs, methods, and curricula (including  
2       model curricula) for training various types of allied  
3       health personnel.

4           “(4) Programs, or means of adapting existing  
5       programs, for training us allied health personnel special  
6       groups such as returning veterans, the economically or  
7       culturally deprived, and persons reentering any of the  
8       allied health fields.

9           “(5) New types of roles and uses for allied health  
10      personnel.

11          “(6) In coordination with the Secretary’s pro-  
12      gram under section 1123 of the Social Security Act.  
13      methods of establishing, and determining compliance  
14      with, proficiency requirements for allied health person-  
15      nel, including techniques for appropriate recognition  
16      (through equivalency and proficiency testing or other-  
17      wise) of previously acquired training or experience.

18          “(7) Methods of recruitment and retaining of allied  
19      health personnel.

20          “(8) Meaningful career ladders and programs of  
21      advancement for practicing allied health personnel.

22          “(b) (1) No grant may be made or contract entered  
23      into under subsection (a) unless an application therefor has  
24      been submitted to, and approved by, the Secretary. Such  
25      application shall be in such form, submitted in such manner,

1 and contain such information, as the Secretary shall by  
2 regulation prescribe.

3 “(2) For purposes of subsection (a), the term ‘eligible  
4 entities’ means those entities which have had an application  
5 approved under paragraph (1) and which are—

6 “(A) schools, universities, or other educational  
7 entities which provide for allied health personnel educa-  
8 tion and training meeting such standards as the Secretary  
9 may by regulation prescribe,

10 “(B) States, political subdivisions of States, or  
11 regional and other public bodies representing States or  
12 political subdivisions of States or both,

13 “(C) entities established to represent the interests  
14 of allied health personnel, or

15 “(D) any entity which has a working arrangement  
16 (meeting such requirements as the Secretary may by  
17 regulation prescribe) with an entity described in sub-  
18 paragraph (A) or (C).

19 “(3) Contracts may be entered into under subsection  
20 (a) without regard to section 3648 and 3709 of the Revised  
21 Statutes (31 U.S.C. 529; 41 U.S.C. 5).

22 “(4) The amount of any grant under subsection (a)  
23 shall be determined by the Secretary. Payments under such  
24 grants may be made in advance or by way of reimbursement,

1 and at such intervals and on such conditions, as the Secre-  
2 tary finds necessary.

3 “(c) For the purpose of making payments under grants  
4 and contracts under subsection (a), there is authorized to  
5 be appropriated \$40,000,000 for the fiscal year ending  
6 June 30, 1974.

7 “TRAINEESHIPS FOR ADVANCED TRAINING OF ALLIED  
8 HEALTH PERSONNEL

9 “SEC. 796. (a) The Secretary may make grants to  
10 public and nonprofit private entities for traineeships provided  
11 by such entities for the training of allied health personnel to  
12 teach in training programs for such personnel or to serve  
13 in administrative or supervisory positions.

14 “(b) (1) No grant may be made under subsection (a)  
15 unless an application therefor has been submitted to and  
16 approved by the Secretary. Such application shall be in  
17 such form, submitted in such manner, and contain such  
18 information, as the Secretary shall by regulation prescribe.

19 “(2) Payments under such grants (A) shall be limited  
20 to such amounts as the Secretary finds necessary to cover  
21 the cost of tuition and fees of, and stipends and allowances  
22 (including travel and subsistence expenses and dependency  
23 allowances) for, the trainees; and (B) may be made in  
24 advance or by way of reimbursement and at such intervals  
25 and on such conditions as the Secretary finds necessary.

1       “(c) For the purposes of making payments under grants  
2 under subsection (a), there is authorized to be appropriated  
3 \$7,500,000 for the fiscal year ending June 30, 1974.

4       “GRANTS AND CONTRACTS TO ENCOURAGE FULL UTILIZA-  
5       TION OF EDUCATIONAL TALENT FOR ALLIED HEALTH  
6       PERSONNEL TRAINING

7       “SEC. 797. (a) The Secretary may make grants to and  
8 enter into contracts with State and local educational agencies  
9 and other public or nonprofit private entities—

10       “(1) to (A) identify individuals of financial, edu-  
11 cational, or cultural need who have a potential to become  
12 allied health personnel, including individuals who are  
13 veterans of the Armed Forces with military training or  
14 experience similar to that of allied health personnel, and  
15 (B) encourage and assist, whenever appropriate, the  
16 individuals described in clause (A) to (i) complete  
17 secondary school, (ii) undertake such postsecondary  
18 training as may be required to qualify them to undertake  
19 allied health personnel training, and (iii) undertake post-  
20 secondary allied health personnel training; and

21       “(2) to publicize existing sources of financial aid  
22 available to individuals undertaking allied health per-  
23 sonnel training.

24       “(b) (1) No grant may be made or contract entered  
25 into under subsection (a) unless an application therefor has

1 been submitted to, and approved by, the Secretary. Such  
2 application shall be in such form, submitted in such manner,  
3 and contain such information, as the Secretary shall by reg-  
4 nlation prescribe.

5 “(2) Contracts may be entered into under subsection  
6 (a) without regard to sections 3648 and 3709 of the Revised  
7 Statutes (31 U.S.C. 529; 41 U.S.C. 5).

8 “(3) The amount of any grant under subsection (a)  
9 shall be determined by the Secretary. Payments under such  
10 grants may be made in advance or by way of reimburse-  
11 ment, and at such intervals and on such conditions, as the  
12 Secretary finds necessary.

13 “(c) For payments under grants and contracts under  
14 subsection (a) there is authorized to be appropriated  
15 \$1,000,000 for the fiscal year ending June 30, 1974.

16 “STATISTICS AND ANNUAL REPORT

17 “SEC. 798. (a) The Secretary shall continuously de-  
18 velop, publish, and disseminate on a nationwide basis statis-  
19 tics and other information respecting allied health personnel,  
20 including—

21 “(1) detailed descriptions of the various types of  
22 such personnel and the activities in which such personnel  
23 are engaged,

24 “(2) the current and anticipated needs for the vari-  
25 ous types of such health personnel, and

1           “(3) the number, employment, geographic loca-  
 2           tions, salaries, and surpluses and shortages of such per-  
 3           sonnel, the educational and licensure and certification  
 4           requirements for the various types of such personnel,  
 5           and the cost of training such personnel.

6           “(b) The Secretary shall submit annually to the Com-  
 7           mittee on Interstate and Foreign Commerce of the House of  
 8           Representatives and to the Committee on Labor and Public  
 9           Welfare of the Senate a report on—

10           “(1) the statistics and other information developed  
 11           pursuant to subsection (a); and

12           “(2) the activities conducted under this subpart,  
 13           including an evaluation of such activities.

14           Such report shall contain such recommendations for legisla-  
 15           tion as the Secretary determines is needed to improve the  
 16           programs authorized under this subpart. The Office of Man-  
 17           agement and Budget may review such report before its sub-  
 18           mission to Congress, but the Office may not revise the report  
 19           or delay its submission beyond the date prescribed for its sub-  
 20           mission and may submit to Congress its comments respecting  
 21           such report. The first report under this subsection shall be  
 22           submitted not later than September 1, 1974.”

23           (b) (1) Section 799A of the Public Health Service  
 24           Act is amended (1) by striking out “any training center  
 25           for allied health personnel” and inserting in lieu thereof



1 "any entity for the training of public and community health  
 2 personnel or allied health personnel", and (2) by striking  
 3 out "or training center" each place it occurs and inserting in  
 4 lieu thereof "or entity".

5 (2) Sections 784, 785, and 786 of subpart III of part  
 6 F of title VII are redesignated as sections 787, 788, and  
 7 789, respectively.

8 (3) Section 314 (c) of such Act is repealed.

#### 9 QUALITY ASSURANCES

10 SEC. 2. The Secretary of Health, Education, and Wel-  
 11 fare shall within one year of the date of the enactment  
 12 of this Act (1) identify and describe each of the programs  
 13 which he administers under which the costs of programs  
 14 of education and training for allied health personnel (as  
 15 defined in section 794 of the Public Health Service Act)  
 16 are directly or indirectly paid (in whole or in part) : and  
 17 (2) take such action as may be necessary to require that  
 18 such assistance is provided only those programs which meet  
 19 such quality standards as the Secretary may by regulation  
 20 prescribe.

#### 21 STUDY

22 SEC. 3. (a) (1) The Secretary of Health, Education,  
 23 and Welfare shall, in accordance with paragraph (2), ar-  
 24 range for the conduct of studies—

25 (A) to identify the various types of allied health

1 personnel and the activities in which such personnel are  
2 engaged and the various training programs currently  
3 offered for allied health personnel;

4 (B) to establish classifications of allied health per-  
5 sonnel on the basis of their activities, responsibilities, and  
6 training;

7 (C) using appropriate methodologies, to determine  
8 the cost of educating and training allied health personnel  
9 in each classification; and

10 (D) to identify the classifications in which there are  
11 a critical shortage of such personnel and the training pro-  
12 grams which should be assisted to meet that shortage.

13 (2) (A) The Secretary shall request the National  
14 Academy of Sciences to conduct such studies under an  
15 arrangement under which the actual expenses incurred by  
16 such Academy in conducting such studies will be paid by the  
17 Secretary. If the National Academy of Sciences is willing to  
18 do so, the Secretary shall enter into such an arrangement  
19 with such Academy for the conduct of such studies.

20 (2) If the National Academy of Sciences is unwilling  
21 to conduct one or more such studies under such an arrange-  
22 ment, then the Secretary shall enter into a similar arrange-  
23 ment with other appropriate nonprofit private groups or  
24 associations under which such groups or associations will

1 conduct such studies and prepare and submit the reports  
2 thereon as provided in subsection (b).

3 (b) The studies required by subsection (a) shall be com-  
4 pleted within the two-year period beginning on the date of  
5 the enactment of this Act; and a report on the results of  
6 such study shall be submitted by the Secretary to the Com-  
7 mittee on Interstate and Foreign Commerce of the House  
8 of Representatives and the Committee on Labor and Public  
9 Welfare of the Senate before the expiration of such period.

10 (c) Within six months after the date prescribed for the  
11 completion of the studies under subsection (a); the Secretary  
12 of Health, Education, and Welfare shall transmit to Congress  
13 such recommendations for legislation as he determines is  
14 necessary to provide appropriate support for the training  
15 programs referred to in subsection (a) (1) (D).

DEPARTMENT OF DEFENSE,  
OFFICE OF GENERAL COUNSEL,  
Washington, D.C., September 17, 1973.

HON. HARLEY O. STAGGERS,  
Chairman, Committee on Interstate and Foreign Commerce,  
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: Reference is made to your request for the views of the Department of Defense on H.R. 9341, 93rd Congress, a bill "To amend the Public Health Service Act to establish new programs of support for the training of public and community health personnel and to revise the programs of assistance under title VII of that Act for the training of allied health personnel, and for other purposes."

The purpose of the bill is stated in its title. If enacted, it would authorize the Secretary of Health, Education, and Welfare to make grants and enter into contracts to assist eligible entities in meeting the costs of development, demonstration, study, or experimentation projects undertaken with respect to various training programs including but not restricted to (1) methods of providing graduate education for public and community health personnel, (2) methods of providing short-term and continuation education for public and community health personnel, (3) model curricula for the education of public community health personnel, and other areas pertaining to public and community health personnel and allied health personnel.

The Department of Defense defers to other interested agencies as to the merits of H.R. 9341.

The Office of Management and Budget advises that, from the standpoint of the Administration's program, there would be no objection to the presentation of this bill for the consideration of the Committee.

Sincerely,

L. NIEDERLEHNER,  
*Acting General Counsel.*

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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,  
Washington, D.C., August 27, 1973.

HON. HARLEY O. STAGGERS,  
*Chairman, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your request of July 23, 1973, for a report on H.R. 9341, a bill "To amend the Public Health Service Act to establish new programs of support for the training of public and community health personnel and to revise the programs of assistance under title VII of that Act for the training of allied health personnel, and for other purposes."

On Tuesday, July 24, 1973, Dr. Charles C. Edwards, Assistant Secretary for Health, testified before the Subcommittee on Public Health and Environment of your Committee on this bill. In substance, he expressed our view that special treatment for institutions of higher education engaged in teaching allied and public health in the form of institutional and student assistance seems neither necessary nor equitable. Enactment of the bill is undesirable because continued federal support of ongoing public and allied training is a lower priority objective than the development of new professions and innovative ways of employing health professions, an effort that will continue under the programs extended by Public Law 93-45.

We are advised by the Office of Management and Budget that there is no objection to the presentation of this report and that enactment of H.R. 9341 would not be consistent with the Administration's program.

Sincerely,

CASPAR W. WEINBERGER,  
*Secretary.*

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EXECUTIVE OFFICE OF THE PRESIDENT,  
OFFICE OF MANAGEMENT AND BUDGET,  
Washington, D.C., September 10, 1973.

HON. HARLEY O. STAGGERS,  
*Chairman, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your request of July 23, 1973 for the views of this Office on H.R. 9341, a bill "To amend the Public Health Service Act to establish new programs of support for the training of public and community health personnel and to revise the programs of assistance under title VII of that Act for the training of allied health personnel, and for other purposes."

In testimony before your Committee on July 24, 1973 the Department of Health, Education, and Welfare stated its reasons for recommending against enactment of H.R. 9341. Among other reasons, the Department stated that a major revision of the legislative authorities for public and allied health programs is unnecessary at this time in view of the recent extension of those authorities provided by P.L. 93-45. The Department noted that the Administration plans to review all Federal health manpower activities during the next several months and will have recommendations for legislation and funding by next January.

We concur with the views expressed by the Department in its testimony. Accordingly, we recommend against enactment of H.R. 9341.

Sincerely,

WILFRED H. ROMMEL,  
*Assistant Director for Legislative Reference.*

Mr. ROGERS. Our first witnesses this morning will be Dr. Charles C. Edwards, Assistant Secretary for Health of the Department of Health, Education and Welfare, and his associates.

We welcome all of you and we will be pleased to receive your statement at this time.

**STATEMENT OF DR. CHARLES C. EDWARDS, ASSISTANT SECRETARY FOR HEALTH, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE; ACCOMPANIED BY DR. JOHN S. ZAPP, DEPUTY ASSISTANT SECRETARY FOR LEGISLATION (HEALTH); ROBERT J. LAUR, PH. D., ACTING ADMINISTRATOR, HEALTH RESOURCES ADMINISTRATION; DR. KENNETH M. ENDICOTT, ACTING DIRECTOR, BUREAU OF HEALTH RESOURCES DEVELOPMENT, HEALTH RESOURCES ADMINISTRATION; AND THOMAS D. HATCH, DIRECTOR, DIVISION OF ALLIED HEALTH MANPOWER, BUREAU OF HEALTH RESOURCES DEVELOPMENT, HEALTH RESOURCES ADMINISTRATION**

Dr. EDWARDS. Mr. Chairman, accompanying me, on my immediate right, is Dr. Zapp, Deputy Assistant Secretary for Legislation (Health).

Next, to Dr. Zapp's immediate right, Dr. Endicott, Director of our Health Resources Development.

Mr. ROGERS. Gentlemen, we welcome you to the committee.

Dr. EDWARDS. Next to Dr. Endicott is Dr. Laur, Health Resources Administration; and on my left Dr. Thomas Hatch, Director, Division of Allied Health Manpower.

Mr. ROGERS. We welcome you gentlemen also.

Dr. EDWARDS. Mr. Chairman and members of the committee, we are pleased to be here today in response to your request to present the position of the administration of H.R. 9341, the proposed "Public and Allied Health Personnel Act of 1973," which would substantially revise the public health and allied health training authorities, recently extended for 1 year by Public Law 93-45.

Quite frankly, Mr. Chairman, we oppose the revision of these authorities at this time. The bill only authorizes 1 year of support; it would not extend these programs beyond the date provided by Public Law 93-45. Your reason for providing this termination date, as explained in your introductory remark, is:

By authorizing 1 year of support in this legislation, we will give public health training and allied health, training a common expiration date with the Health Manpower Training Act. In this way, we will force a review of all similar authorities at the same time, insuring that overlap and duplication will be eliminated.

With this, Mr. Chairman, we totally agree, and I would like to say a word about this in a moment.

With your permission, Mr. Chairman, I would like to submit for the record the remainder of my testimony. I am sure you have heard on several occasions the administration's reasoning behind the 1974 budget decisions on categorical items, and this basically has not changed.

With your permission, I will submit this statement for the record, and I would like to make just a couple of other remarks.

Mr. ROGERS. Without objection, it is so ordered. [See p. 24.]

Dr. EDWARDS. I would like to add and strongly stress the fragmentation of manpower authorities, in our judgment, must be eliminated. From where we sit the best opportunity to address this problem also derives from the necessity of considering them all in the context prior to a common expiration date.

For that reason, we would prefer not to have this rather narrow piece of manpower legislation enacted at this time. The development of a coherent approach to this country's health manpower problems—what we are terming a health manpower strategy—is certainly one of our highest current priorities.

I feel we need first to answer some extremely complex and difficult questions and place together many pieces of data and experience that have never been examined side by side before.

In short, what we are trying to do is get a perspective on the whole issue before we reach any conclusions regarding the component parts.

The relationship between the various types of health manpower and consequently the impact which decisions affecting one group may have upon another are too obvious to belabor this morning.

A definition of the appropriate role of the physicians will necessarily define the roles of the physician extenders and should influence licensure practice and influence the curriculum for public health training and other types of health training. We certainly need this type of information to draw our conclusions and we also think you need this information for your deliberations as suggested in section 3 of your bill.

We think moreover, the health provisions and the American public need to question and reassess manpower needs and goals on the basis of factual data and sound professional judgment.

Mr. Chairman, with those remarks, I would like to conclude my formal remarks and we would be delighted to answer any questions that you or members of the committee might have.

[Dr. Edwards' prepared statement follows:]

**STATEMENT OF DR. CHARLES C. EDWARDS, ASSISTANT SECRETARY FOR HEALTH,  
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE**

Mr. Chairman and members of the subcommittee, I am pleased to be here today in response to your request to present the position of the Administration of H.R. 9341, the proposed "Public and Allied Health Personnel Act of 1973," which would substantially revise the public health and allied health training authorities, recently extended for one year by P.L. 93-45.

Quite frankly, Mr. Chairman, we oppose the revision of these authorities at this time. The bill only authorizes one year of support; it would not extend these programs beyond the date provided by P.L. 93-45. Your reason for providing this termination date, as explained in your introductory remarks is:

"By authorizing only one year of support in this legislation, we will give public health training and allied health training a common expiration date with the Health Manpower Training Act. In this way we will force a review of all similar authorities at the same time, insuring that overlap and duplication will be eliminated."

When he signed P.L. 93-45, the President stressed his disagreement with the Congress on continued "subsidies to allied and public health training." In short, we strongly believe that these categorical Federal support activities should be eliminated. The President's signing of P.L. 93-45, however, recognized that Congress may want to review these programs carefully in light of the considerations that led him to propose their elimination in the 1974 budget. For that reason we recommend that this rather narrow slice of manpower legislation not be enacted at this time. We plan to review all Federal health manpower activities and will have our recommendations for legislation and funding by next January. We believe the Congress will also want to review these recommendations in the context of a comprehensive look at health manpower.

## BUDGET DECISIONS AND ADMINISTRATION POSITION

The President's FY 1974 budget request reflected a careful assessment of the need for many Federal programs, including continued subsidy of allied and public health training. Every program was subject to rigorous scrutiny. No program could be justified solely on the basis that "we've always done it before." I think we all benefit from this kind of tough reexamination, reevaluation and updating of our priorities for taxpayer investments.

In the close review of training authorities, a number of inequities and inconsistencies were disclosed which required reformulation and redirection of the Federal assistance programs for training. The keystone of the Administration's approach to training has been to rely on general student assistance programs and to move away from separate categorical student aid programs. This approach emphasizes equity of access to educational benefits and, further, targets Federal assistance on areas of national shortage. It generally does not countenance the Federal subsidy of persons with high future income potential, with relatively easy access to other available education-financing sources, or the development of unnecessary specialized skills at the public expense.

Specifically, Mr. Chairman, I should like to share with you and your Subcommittee the reasoning behind the 1974 budget proposals calling for the termination of categorical support programs for public and allied health training. With respect to public health, I believe the following considerations are important:

The majority of the Nation's 18 public health schools are public institutions which do have public resources available to them for additional general support.

Federal support for public health educational activities clearly serving a national need, e.g., demonstration of innovative educational techniques and curriculum reform, will continue through special project grants assistance, under the educational initiative awards authorities of the Comprehensive Health Manpower Act. The schools also will continue to receive special purpose funds from other Federal programs.

Student assistance is available through alternative sources, e.g., the programs that are generally available to all students administered by the Office of Education, including loan programs. The salary levels of trained public health workers are adequate for students to repay any loans which may have been obtained.

Federal institutional support through these authorities for the schools of public health amounted, on the average, to less than one-fifth of the institution's total expenditures during the 1970-1971 academic year.

Insofar as allied health training support is concerned, the following reasons led to the 1974 budget proposals:

Federal support for selective funding of allied health activities which clearly serve national needs will continue through special project grant assistance under the flexible educational initiative awards authorities of the Comprehensive Health Manpower Act.

Student assistance is available through alternative sources, e.g., the programs administered by the Office of Education that are generally available to all students, including loan programs. The salary levels of trained health workers generally are adequate for students to repay any loans which may have been obtained.

Federal funding has not been a crucial factor in the substantial growth in the allied health field. Federal support has been small in relation to State, local, and private spending in this field.

In summary, the budget recommendations opposed the subsidy of ongoing training activities that merely subsidize the production of more of the same types of health workers. At the same time, however, funds were requested for special projects where new types of professions could be supported, e.g., physician assistants.

I would now like to turn to the specific provisions in H.R. 9341.

## PUBLIC HEALTH

## SUPPORT GRANTS FOR SCHOOLS OF PUBLIC HEALTH

Section 309(c) provides for Federal institutional support grants for schools of public health. In 1956, there were only 11 schools of public health; now there are 18 in 16 States (California has 3) and a number of universities are considering establishing new ones. Enrollments in the schools have tripled.

Continued Federal support for public health training is questionable in light of the demand for training by students who want to enter these professions. Moreover, such training is no longer the sole province of schools of public health. Schools of business administration, departments of community medicine in schools of medicine and dentistry, engineering schools, nursing schools, schools of hospital administration, as well as many interdisciplinary arrangements among departments or schools in the universities all play an important role in the preparation of personnel for planning of health services, health services administration, preventive medicine and dentistry, environmental health, public health nursing, and other public health activities.

Last year, fiscal year 1973, we paid \$5.5 million solely in formula grants to the 18 schools of public health for their support. We do not believe a Federal institutional support subsidy such as this can be justified in the light of our overall general higher education policies to concentrate support on needy students. We also concluded that support for these schools could appropriately come from tuition and from State and local resources.

#### TRAINEESHIPS FOR GRADUATE OR SPECIALIZED TRAINING IN PUBLIC HEALTH

Section 306 of the present Public Health Service Act authorizes traineeships for graduate training in public health. Under this authority, grants for traineeships have been awarded to the training institutions—schools of business administration, hospital administration, public administration, public health, nursing, and to health departments and other public or nonprofit institutions providing graduate or specialized training in public health. Students apply for support to the individual training institution.

The majority of the public health trainees have already completed their basic professional education as physicians, dentists, nurses, engineers, sanitarians, or other professional personnel. They are good credit risks. Those trainees who need financial aid can look to the general programs available for student assistance, particularly through the Guaranteed Loan Program and the National Direct Student Loan Program of the Office of Education. Amounts secured through loans can be repaid from salaries after training is completed.

#### ALLIED HEALTH

The bill would also significantly modify the allied health training authorities of Part G of Title VII of the Public Health Service Act.

Since fiscal year 1967, Federal funds have been provided under this program to maintain and expand certain allied health curricula, to support advanced traineeships, and to promote experimentation, demonstration, and developmental activities in the allied health field.

The greatest expenditure of funds has been concentrated on the maintenance or expansion of training programs. However, in junior and senior colleges less than one-third of the more than 3,200 allied health training programs located in such institutions have received assistance.

Moreover, Federal support has been minuscule in relation to State, local and private spending for these purposes.

Large numbers of students are seeking careers in allied health. Colleges are responding to both student pressure and pressures from the health services needs in the communities by establishing and expanding training programs. The number of allied health training programs in junior and senior colleges alone has grown rapidly—doubling between 1965 and 1971—and the number of graduates from these programs has trebled. This substantial growth occurred largely without the impetus of Federal funding.

Institutional support for allied health training programs must come from State and local funds, tuition payments, and private sources. Moreover, when support comes from such sources, the training programs are likely to be more responsive to local needs. Indeed, traditionally most allied health personnel have been trained to meet local needs.

We see the Federal role in allied health as concentrating on experiments, demonstrations, and innovations, and developmental activities which show promise for the solution of problems of training or utilization of health manpower. We would continue, for instance, to support projects related to new types of health manpower, development of team approaches to the delivery of health services, improvement of credentialing mechanisms, demonstrating ways of



building on the skills of persons with previous experience in the health fields, and supporting the development of proficiency testing mechanisms and other means of measuring skills.

Allied health student enrollments, however, are burgeoning, and will continue to increase through participation in the general student assistance programs of the Office of Education: the Basic Educational Opportunity Grants, College Work-Study Aid, National Direct Student Loans, and Guaranteed Student Loans.

In his education budget for fiscal year 1974 the President is requesting \$959 million for Basic Opportunity Grants. This will provide full funding for this program and constitutes the fulfillment of the President's promise to remove financial problems as a barrier to higher education.

#### STUDIES

As suggested by the study provisions in section 3 of your bill, you apparently believe further justification for continuing these programs should be developed. We agree and think that we need considerably more analysis and justification before we can recommend institutional support for allied and public health schools.

We therefore intend to look again at the fields of allied and public health between now and next January to see if a case can be made for a broader Federal role than one aimed solely at innovative approaches. We object, however, to the proposals for studies by the National Academy of Sciences contained in H.R. 9341.

The statutory mandate that the Secretary request the National Academy of Sciences (NAS) to conduct studies on the "need" for allied health, before considering alternative contractors is inappropriate. It violates one of the primary principles of Federal contract management—namely competitive award of contracts. We believe it is generally inappropriate to award Federal contracts to specific contractors designated by statute.

It may be in the Government's best interest to have some other agent conduct such studies. In any event, we believe that HEW should have the flexibility to request study proposals and to award the contract to the best proposal for addressing the issues.

The end product of these studies is essentially management and program information on the need, availability, and adequacy of training for scientists. The expertise to conduct such a study requires economics, manpower analysis, and many other skills—as well as some knowledge of the scientific community's preferences. The provision requiring the study by designation of the National Academy of Sciences or any other specific group would tend to inhibit obtaining the best available agent on the basis of competitive bids.

#### CONCLUSION

Special treatment for institutions of higher education engaged in teaching allied and public health in the form of institutional and student assistance seems neither necessary nor equitable.

Mr. Chairman, your bill would maintain a categorical approach and, in fact, assumes a continued need for a Federal support role for allied and public health training. Moreover, it is administratively cumbersome with regard to definitions, reports, activity restrictions, etc.

We oppose enactment of this bill both because it is unnecessary in view of the P.L. 93-45 extension and because we believe that continued Federal support of ongoing public and allied training is a lower priority objective than the development of new professions and innovative ways of employing health professionals.

Mr. Chairman, this concludes my prepared statement. My colleagues and I would be pleased to try to answer any questions you and other Members of the Subcommittee might have. We have appreciated this opportunity to state the Administration's views.

Mr. ROGERS. Is there any comment that any of your associates would like to make at this time?

Dr. EDWARDS. No, sir.

Mr. ROGERS. What is the need for allied health personnel? Do we have a shortage?

Dr. EDWARDS. I don't think there is any question but that there is a need for allied health professionals, but I think we have to first define what we mean by an allied health professional.

Once we get some of these definitions in place, then I think we can probably better assess need.

Mr. ROGERS. Has the definition changed since we have had these laws?

Dr. EDWARDS. The definition per se has not changed, but I think in terms of the way these personnel are being utilized, the way they are being accepted by the various other health professions within the health manpower group, certainly needs greater definition, clarification, and acceptance.

Mr. ROGERS. I am sure you know this bill, for the first time, effectively defines that.

Dr. EDWARDS. I would hasten to also add that our objection to the bill at this particular point in time has nothing to do with the value or the need for allied health professionals. The whole point we are making is that we feel that allied health professional education must be considered in the context of other types of health manpower educational activities.

Mr. ROGERS. I would presume that would be true. Is there a shortage or isn't there? I am trying to put it in that context—in the Nation.

Dr. EDWARDS. I don't feel there is a shortage per se.

Mr. ROGERS. I am amazed because that is the first testimony I have ever heard to that effect and we have conducted hearings for some years in this matter. The normal accepted figure is 250,000 short on allied health personnel.

Do you have any statements to show that is not a correct estimate?

Dr. EDWARDS. I think anyone who says there is a shortage of 250,000 personnel is being deluded the same way we were deluded 10 or 15 years ago saying we were a number of doctors short.

Mr. ROGERS. May I ask Dr. Endicott, who, as I recall, had studies and presented this testimony, to comment on this since we obtained those figures done by his previous responsibility.

Dr. ENDICOTT. I would like to qualify my answer—

Mr. ROGERS. I don't mean to put you on the spot. I thought there were some studies, backup and estimates made in this area. The committee had been presented with them before.

Dr. ENDICOTT. There have been and I don't think any of us has really been satisfied with the validity of precise numbers.

Mr. ROGERS. I understand some of these are estimates, but I don't think you would be 250,000 off, would you?

Dr. ENDICOTT. I believe the best evidence that there has been a shortage relates to the marketplace. This is an area of health manpower in which there is no unanimity of opinion as to the definition of its limits. The actual supply in the work force has increased more rapidly over the last decade in the allied health area than in any other area of health manpower. There is no serious evidence of unemployment.

I think, if I remember correctly, there has been a doubling of allied health manpower in somewhat less than a decade and they are all finding work. So, clearly, the opportunity for employment in this area is very large. I think in attempting to forecast not only the shortage

perhaps at this moment, but the shortage 10 years downstream, this estimate is made extremely difficult because of the increasing role that not only existing types, but types just being developed will play in the health delivery system of the future.

It is my impression that if there is any consensus in the health manpower area, it is that the senior professionals in the field are now doing many things in their daily work which could be done as well or perhaps even better by people with less training—more specifically focused to do a part of the job under general supervision. So, there is not only an existing shortage in some fields, but that the demands will increase in the future. I don't believe anyone would argue about that.

Dr. EDWARDS. Nor would I.

Mr. ROGERS. I wouldn't pursue this too long except to say the health manpower resource book published in 1970 by the U.S. Department of Health, Education, and Welfare says on page 34, table 15:

Allied health manpower requirements and supply, 1975-80; allied health, at least baccalaureate medical allied and so forth, the total allied health manpower in 1967, the deficit was 227,700; in 1975, the estimate was 343,000 and by 1980 that deficit is estimated to be 432,000.

It concerns me that the facts that have been in a study are now contradicted, but I don't see any study contradicting those figures. Do you have such a study?

Dr. EDWARDS. Mr. Chairman, If I could ask Mr. Hatch to speak to the study, he is the one who put that data together.

Mr. HATCH. Mr. Chairman, the important thing to remember is the data in the source book you are quoting was based on a study principally in hospitals at that time. We are trying to update these figures.

Mr. ROGERS. You have stopped publishing these source books?

Mr. HATCH. That was the last publication.

Mr. ROGERS. Why is that? Don't the figures jibe or do you just want to stop publishing the book so your policies can change without any studies? Is there any reason why we should not continue to give the public what we have previously given them?

Dr. EDWARDS. I don't know the rationale behind stopping publication.

Mr. ROGERS. Does anybody?

Dr. ENDICOTT. I believe probably the reason this was done was that in the course of public hearings and reenacting manpower legislation, the kinds of reports that were going into the source book were required in reports to the Congress and it would have amounted to largely a compilation of material which we were submitting in other forms. There was no policy decision to suppress it. I am sure of that because I was in charge at the time.

Mr. ROGERS. It is strange to me that all of a sudden it stops when the policy changes that you want to stop the program. Now you don't want to tell us what the need is, but you say it exists, and I see no published studies. This causes me concern. I hope you will check into that, Mr. Secretary, and let the committee have any studies, if such have been made, to say your prior studies were absolutely no good or wrong.

Dr. EDWARDS. I would not say we were wrong, but until we know what overall manpower strategy we are talking about—

Mr. ROGERS. We have been through the whole legislative process, including the Department of HEW. We went through all of the manpower programs. We designed legislation in cooperation with HEW and I am sure Dr. Zapp remembers that he helped and that the President said he supported the House version. Isn't that correct, Dr. Zapp?

Dr. ZAPP. That is correct, Mr. Chairman.

Mr. ROGERS. When we said we wanted to stop the shortage of doctors and we designed the legislation, we had the allied health. I won't question further at this point.

Mr. Nelsen may have some questions.

Mr. NELSEN. Dr. Edwards, I notice that you read only a part of your statement and very likely there are many answers to question that might be in our minds in the balance of your statement. I presume you had a reason for just summarizing it.

Dr. EDWARDS. I did, Congressman. As I mentioned, part of our statement was a reiteration of the administration's philosophy or reasoning behind certain of our budget decisions on categorical activities such as we are talking about this morning.

You have heard it and the chairman and other members of the committee have heard it on several occasions now.

Mr. NELSEN. I understand that.

I have been getting some letters on public health nurses and students in this area. How many students do we have presently enrolled in educational institutions around the country.

Dr. EDWARDS. School of public health?

Mr. NELSEN. Yes.

Mr. HATCH. There are approximately 5,000 students enrolled around in the country in the schools of public health.

Mr. NELSEN. Are most of them receiving financing of some kind as individual students?

Mr. HATCH. Yes, sir, a considerable number do receive some support either through Federal traineeships from various programs, from State sources, as well as from private sources. Some also support their own training.

Mr. NELSEN. No one disputes the fact that health manpower is needed. I think your direction has been changed to some degree; to a considerable degree. How do you propose to stimulate the production of more health manpower? In your change of direction, do you feel, Dr. Edwards, that your substitute plan will do the job? I wish you would go into that a little bit more. How do you propose to handle the problem in a different way from what you have been doing?

Dr. EDWARDS. Let me make several remarks. What we have been doing is categorically pursuing and going down separate roads with no idea of what we want to accomplish. I cannot tell you this morning I have that plan.

I can tell you we are now in the process and I know you have heard this song before; but nevertheless, there are probably 10 different studies, all related to each other, that have been completed or in the process of being completed in the Department. Right now we are working very hard to pull together at least an interim kind of health strategy prior to the expiration date of next June of these various manpower statutes.

We are trying to develop a manpower strategy. What we are suggesting this morning is that maybe this piece of legislation is premature until we share with you and work with you on this strategy we are trying to develop.

Mr. NELSEN. One of the circumstances that puts us in the position of extending the programs another year is the fact that it seems we would not be ready with a substitute plan in time to take care of things. This motivated the committee and I think that we would likewise not object to a substitute plan the minute it was ready to go.

You mentioned in your testimony that funds could be made available for programs which clearly serve national needs under the educational initiatives awards program. Have you asked for increased funding in this program in the event it replaces for what you have done in the past.

Dr. ENDICOTT. We asked approximately for a doubling of the appropriations under health manpower initiative awards as between 1972 and 1974.

Mr. NELSEN. If it is funded through an educational initiative, would this come under health or education?

Dr. ENDICOTT. I believe our request has been recognized by the House in its appropriations for 1974 for that item. That is contained in the Comprehensive Health Manpower Training Act which you enacted in 1971.

Mr. NELSEN. With the prospect to HMO's, how do you propose to meet that manpower problem they will generate?

Dr. ENDICOTT. If you will recall, Mr. Nelsen, the manpower educational initiative awards was a rather unique authority which was discussed at some length with this committee in 1971. It is unique in that it does not identify any particular category of scholarly institution as being eligible.

If I recall correctly, the legislation makes eligible any public, non-profit educational or health entity for the receipt of grants or to enter into contracts for the purpose of improving supply of health manpower and improving the delivery of services.

It is a very broad authority which we have used, I think, with some discretion in focused areas. In the first year almost all of the funds went into two categories. One was to establish about 10 or 11 area health education centers which served to educate a variety of health manpower personnel ranging all the way from physicians, family care practitioners, on through a number of allied health categories.

The other area we used this authority was in the training of physician assistants which would fall again into the allied health area.

The decision was made in the 1974 budget to use this authority in selected areas of allied health and public health because the administration was proposing that those specific authorities not be extended beyond June 30, 1973.

Mr. NELSEN. How many schools and colleges do we now have that are training allied health professionals?

Dr. ENDICOTT. We have just completed a survey in which we have identified all of the programs and the junior colleges and 4-year colleges in the United States. I believe Mr. Hatch has that study with him.

Mr. HATCH. Yes, sir, our studies in programs in junior and senior colleges indicate that there are about 3,000 programs training people in the allied health professions, graduating approximately 34,000 or 35,000 students. We are in the process now, Mr. Nelsen, of doing a study of hospital training programs in which we will, at that point, have just about completed the spectrum of locations in which allied health personnel are trained.

Mr. NELSEN. As I understand the view you have, Dr. Edwards, it is that you do have some extensive plans for approaching all of the problems that you deal with and you feel that were we to move on a bill such as the one we are considering today, it would sort of get in the way of the approach that you seek to take.

Dr. EDWARDS. That is in general correct, Mr. Nelsen. I don't think that it would cause a great deal of damage, but I don't see that it would do a great deal of good, particularly inasmuch as it expires at the same time the extended legislation expires.

I guess my whole point is I don't see that it is really contributing very much and perhaps should be rethought in the context—again, I am not talking about waiting until June 1 to come up with some new thinking on this, but I would hope we would have some new thoughts, and thinking based upon this data that is being generated by certainly midfall.

Mr. NELSEN. In other words, you would not object if we moved a little bit slower until you got your material together?

Dr. EDWARDS. It might be to the committee's advantage and certainly to our advantage if we could.

Mr. NELSEN. You feel under the type of reorganization that you are considering at the moment, you would be able to reduce administrative costs, it would develop more efficiency, less overlapping—are those the things that you are seeking?

Dr. EDWARDS. I have no illusions that what we might suggest would certainly reduce cost considerably in the near term. I think that certainly should be a long-range objective. I would hope as we better develop and define the role of the allied health professional and other health professionals and more clearly define the role of the physician, we can perhaps get an element of economy into it by better handling people—in other words, not using doctors to do all kinds of health care tasks.

Mr. NELSEN. Dr. Zapp, do you have any comment?

Dr. ZAPP. I guess my question was whether your question was toward the reorganization and their new functional arrangement in the health agencies.

Mr. NELSEN. I understand you are working on reorganization?

Dr. ZAPP. Yes.

Mr. NELSEN. One question unrelated to this bill, I asked the question about HMO's. I would like to have supplied for me the number of States that now permit medicare payments to HMO's. Also, to what extent does medicare allow participation in HMO's? These will be factors in our considerations. I would like to have that information.

Dr. ZAPP. We will be pleased to provide that. I don't have all of the data with me. Our 1972 data indicated there were about \$272 million in State-Federal funds used to pay for services in HMO-type

organizations. I would assume it is considerably more than that and we are trying to accumulate the data. It is a State option whether they have these plans and about 20 have so chosen at this point.

[The following statement was received for the record:]

There is no restriction on States in general which would prohibit them from entering into Title XIX-HMO contracts. At the present time the following 12 States have such contracts: California, the District of Columbia, Hawaii, Maryland, Massachusetts, Michigan, Minnesota, New York, Pennsylvania, Rhode Island, Utah, and Washington.

Mr. NELSEN. Thank you.

Mr. ROGERS. Mr. Preyer.

Mr. PREYER. Thank you, Mr. Chairman.

It is good to see you again, Dr. Edwards.

Is there any shortage of public health manpower personnel right now, and, if so, would you estimate what it is?

Dr. EDWARDS. Again, I would qualify my statement by saying there is perhaps an overall shortage across the board, but it runs in different areas. I don't think there is any question that there is need for more people trained in the various aspects of public health.

Again, I would emphasize that it is more in some areas than in others.

Mr. PREYER. We have a document entitled here "Professional Health Manpower For Public Health" dated March 1, 1973, which estimates that there would be a shortfall of professional health manpower of 5,250 by 1975.

If that is accurate, since we are now producing 2,500 a year, that would mean a pretty massive expansion of our public health schools, would it not?

Dr. EDWARDS. If those figures are accurate, yes. I think we have to recognize there are a lot of people going into the public health field coming from schools other than public health.

More and more of our business schools around the country are instituting courses in health system management. The administrative capacity of the health system is being considerably aided by many of these efforts.

As you know, there are courses in many universities that are not necessarily under a school of public health that contribute to the training of people who go into public health, so I don't think these figures are totally accurate.

Mr. PREYER. We would be glad to share these figures with you and we would like to get your comments on them [see p. 38] because I think it is the key to identifying just how much the shortage is.

Dr. ENNICOTT. Might I offer a comment at this point, Mr. Preyer?

The field of public health, I think, is in a state of very rapid change, after a long period of time in which there was not very much change. The emphasis of public activity in the general field of health has undergone a very substantial change in our lifetime. In the early days, Government was concerned primarily with the control of communicable and transmissible disease and problems of malnutrition. The schools of public health developed great strengths in the area of infectious disease, epidemiology, sanitation and those areas which coped with the infectious diseases.

If you look at the Federal Government and what it is doing now, the State governments and the communities, the emphasis has changed from prevention to the delivery of services to those who are ill.

Now the big Federal Government thrust is in medicaid and medicare rather than in quarantine and sanitation.

The schools were lamentably slow to recognize this change and to be working at the cutting edge rather than sort of facing backward.

As a result, manning the new HMO's, to take a current example, management personnel trained in the sophisticated delivery of services to the ill have not developed the pace in the schools of public health and, in fact, other schools in the university may have taken the lead—the school of business administration, and so forth and so on.

It is in these new areas, new kinds of professions that there are obvious shortages; such as, physicians in epidemiology and so forth. There may be a surplus of people trained in the more traditional things, whereas at the same time, we have a shortage of health planners, health service delivery administrators, and so on.

So, you have a mixture of surplus and shortage in the same broad field concurrently.

Mr. PREYER. It may well be that emphasis is shifting more to delivery of services and somewhat away from prevention, that the Public Health Service is becoming more sophisticated in that respect, but what I am interested in is what the shortage is in those things that public health manpower does for us which seem to me extraordinarily important.

They contain epidemics, prevent botulism, do the quarantine work, as you say, immunize against polio, typhoid and so forth. What the Public Health Service does is the reason we don't get sick in this country.

When you go to a restaurant, you don't get botulism because of the Public Health Service. So, what it does by way of prevention is important and I think it is important they keep doing that.

I am not concerned so much about more sophisticated delivery of services.

We will make these figures available to you and we would like to get your comments, because they indicate to me that Public Health Service manpower, which does the kinds of things that no one else does, is going to be short 5,250 people by 1975.

Now, assuming that that is the case, that we are short, say, 5,000 people, how long would it take us to meet that shortage as things are now and how long would it take if we stopped supporting schools of public health?

Dr. EDWARDS. Mr. Preyer, let me just say a word or two or then maybe Dr. Endicott or Mr. Hatch could append their comments.

When you talk about sources of statistics first, you have to recognize in the field of public health that there are a variety of sources. As an example, I have a document before me which lists statistics from about seven different organizations. I don't know how accurate any of them are.

Mr. ROGERS. Where did you say your figures were obtained? I think it would be well for the record to make clear where these figures came from.



Mr. PREYER. This is from the Association of Schools of Public Health dated March 1, 1973. It says several sections are still pending completion. Final draft will be available March 7.

Mr. ROGERS. It is from the Association of Schools of Public Health?

Mr. PREYER. Yes.

Dr. EDWARDS. We have four or five other places, too.

Again, I think it is important, Mr. Preyer, you can't just use the figure 5,000. I think you have to look at seven or eight different disciplines within the field of public health, hospital administration, health educators and so on. There are shortages in areas and in other areas the shortages are considerably less.

In the field of administration and management more and more of the really capable administrators are not coming out of Schools of Public Health, but other schools within universities. The only point I am trying to make is we can't deal in total numbers, but we have to break these numbers down into specific disciplines.

Mr. PREYER. I would agree with that. Perhaps until each of us has a chance to study this study a little more, perhaps we should not try to get into too much detail. Someone has said statistics never lie, but they sometimes fail to tell the entire truth.

Dr. ENDICOTT. I think we can get a ball park estimate of the significance of the figure of 5,000, if we bear in mind this is approximately the annual output of schools of public health. It is on the order of 5,000—

Dr. EDWARDS. Twenty-five hundred.

Dr. ENDICOTT. If you add to that the output from personnel from related schools of business administration, hospital administration, we are within a ball park of an annual magnitude of one or two.

The schools of public health with whom I have been in contact in the recent 3 or 4 months would indicate that most of those schools have at least the three qualified applicants for the number of places that they now have available.

So, in the marketplace, if the schools of public health and the schools of business administration and other related schools were to decide rapidly to fill the so-called shortage and to expand their entering places, the pool of applicants is probably enough in the relatively short period of time to satisfy the shortage and indeed, if they kept on at this accelerated pace to glut the market.

What I am trying to say is the shortage here is not one of great magnitude. It is a manageable kind of thing which you would normally expect the marketplace to adjust to to some extent.

Mr. PREYER. If I could try to sum up the statistical problem, these figures take into account that the schools are turning out presently 2,500 a year. If there is a shortage on the magnitude of 5,000 a year, it would mean a rather massive expansion of what they are turning out. The point I want to make is that if there is some kind of shortage, and if we stop supporting schools of public health we are not going to be very likely to make up that shortage. When you say there are three qualified applicants for every opening, it seems you are saying we will pay for them by gate receipts. We will charge all the traffic will bear and can still fill up the schools because there are enough applicants. This is like saying only the children of the wealthy should

apply to these schools, and I don't believe that is a very democratic approach.

Let me ask this: How many schools do you think would close, of the public health service schools, without Federal support, if any?

Dr. EDWARDS. I would have to ask Dr. Endicott. It is my understanding immediately none. Dr. Endicott may want to speak to that.

Dr. ENDICOTT. If all Federal support, not just the support that comes from the program we are considering today, but all Federal support to schools of public health were to stop immediately, they would all be in real trouble and some of them almost certainly would not have enough turn-around time to stay open.

The average national contribution to the operating budget of schools of public health from all sources is on the order of 40 percent of their operating budget. This includes programs not only of the DHEW, but other agencies and departments.

There was a period in the early months of this year shortly after the budget for 1974 was announced when a number of institutions talked as though they might close their doors this summer. There were four that came to my attention that were specifically and particularly in bad shape, they thought.

As time has gone on and as State legislatures or as private foundations or the parent university came to the rescue, it is my understanding that all 18 are in fact going to stay open.

The most recent one that I heard from was one which concerned me personally a great deal. This was the University of Puerto Rico which not only supplies manpower to this country, but is probably the main educational institution for the Spanish-speaking nations of the Western Hemisphere in the public health field.

The Commonwealth of Puerto Rico has doubled the hard-money appropriations to that school. I spoke to the acting dean just last week, and they are certainly going to stay open. It is a long answer.

There were some days there where it looked like perhaps four might close. Now it looks as though none will close.

Mr. PRYER. I understand that the schools have estimated that these programs support an average of 34 percent of the faculty of the schools. You mentioned some 40 percent of the budget generally comes from Federal support. Your answer that four were about to close, that many were on the borderline and that they have been able to make up the difference with some foundation help or from a State legislature is not very encouraging.

It sounds like sort of a crash program financing to me. I think this is a question we will certainly want to look into.

What other support is there in terms of dollars per school? Are you saying we will have to rely on funding from State legislatures or foundations? Is that going to be the answer?

Dr. ENDICOTT. I believe Mr. Hatch has collected data on the categories of various Federal support and State appropriations for all of the schools of public health which we would be happy to supply for the record. I believe this is up to date.

Mr. HATCH. This is based on data that we collect in connection with the grants to schools of public health which shows that approximately 25 percent of the institutions' support, and this is just for teaching, comes from university sources. Tuition endowment indirect cost pay-

ments, about 16 percent; indirect services provided by the university about 16 percent and other non-Federal sources  $3\frac{1}{2}$  to 4 percent, for the total non-Federal being at about 60 percent of the total operating costs of the schools.

Mr. PREYER. What do you think the enrollment would fall to if they cut off these Federal support programs for Public Health Service schools? Was there any estimate of that?

Dr. ENDICOTT. I think we are just about to find out because the stipend support is obviously expected to be reduced for the students entering this fall.

Mr. PREYER. How many faculty members have left these schools because of the various strictures?

Dr. ENDICOTT. My information is anecdotal, but it is based on discussion with practically all of the deans of public health in the past few months.

The faculty in many schools has been reduced. The percentage of reduction has varied a good deal from one school to another. Most of the faculty that has been lost, of course, has been the nontenured faculty and this tends to be the younger members of the faculty or those most recently appointed.

There has been an overall reduction. It is probably still continuing and it may be some months before we will really know how the 1974 faculty compares to the 1973, because the schools are still actively looking for additional funds.

There has been a reduction and any day one could get the information from the schools as to just what it is at the time.

Mr. PREYER. I think we would be interested in that information.

Dr. ENDICOTT. The enrollment is still under negotiation. Apparently the interest of students has not dropped off. Those who might have been expecting some kind of Federal stipend are still, you might say, scrounging around to find some other source of support. I don't think enrollment is actually going to drop. But obviously where schools have recently offered curricula in new fields and have recently employed faculty to provide this kind of training, they may have to refuse to accept students in these areas and take more students in some other areas. This is still in the process of evolving.

Mr. PREYER. Just to mention two specific examples of schools I have heard have been in particular trouble, what is the status at Oklahoma and Columbia now?

Dr. ENDICOTT. Oklahoma is a relatively new school which has not had extensive support from the State of Oklahoma. They are consolidating the school of public health and the school of allied health into a school—what is the title—

Mr. HATCH. The School of Health and Allied Health.

Dr. ENDICOTT. This school will still have accreditation as a school of public health, although it has changed its name. That happens to be one of the four institutions that we were advised might possibly close, but clearly they have found a way to consolidate.

Dr. EDWARDS. Isn't it true their major problem was with the State legislature, since they were getting 6 percent of their funding from the State sources?

Dr. ENDICOTT. Yes, and here again, there was the question of competition for funds. The Oklahoma Legislature has been pressing the

medical school to expand and has authorized what amounts to a 2-year medical school and a school of osteopathic medicine in Tulsa. So, in the State of Oklahoma, the health manpower budget is becoming a pretty large item in the State appropriation.

I am sure this has caused some considerable competition among the various categories for State funds.

Mr. PREYER. What were the other two schools of the four besides Oklahoma and Columbia?

Dr. ENDICOTT. I believe Tulane and Loma Linda.

Mr. PREYER. I have taken up more time than I should have, Mr. Chairman.

Let me just say finally, you have indicated to us that there certainly has been faculty reduction. If we are going to be cutting off support for the important, key people in these schools, it seems to me surprising that we don't have some better answers to our questions about the effects of the policy, about what is going to happen from this, how many schools are going to close if we cut off public support, what their enrollment will fall to, how many faculty people will be lost in the future, how the role of public health is going to be handicapped by the lack of this support.

We will make these studies available to you and we would like to get your comments on them.

Thank you, Mr. Chairman.

[The following information was received for the record.]

COMMENTS ON PROJECTED DEFICITS IN PUBLIC HEALTH MANPOWER BY 1975 ESTIMATED IN "PROFESSIONAL HEALTH MANPOWER FOR PUBLIC HEALTH," DATED MARCH 1, 1973

The projected deficit of 5,250 public health professionals with masters level training or higher, cited in this draft paper, is based on projected estimates of supply in 1975 weighed against projected requirements. The requirements estimated do not include professional public health workers in such fields as environmental health, occupational health, public health nutrition, public health laboratory, public health veterinary medicine and other public health fields.

The information is not based on new comprehensive and definitive studies addressing supply and demand for public health manpower, but rather is based on earlier estimates from a variety of sources. As the document itself points out, the study is only preliminary and only partially complete. It would appear to be premature to draw definitive conclusions from the material at this time.

Mr. ROGERS. Dr. Carter?

Mr. CARTER. Thank you, Mr. Chairman.

How long have we had Public Health Service schools assisted by the Federal Government?

Dr. ENDICOTT. If I remember correctly, it was called the Hill-Rhodes bill, enacted about 1957. This category of schools was the very first in the health area to be given overt public support for education of health professions. It antedates the others about a decade.

Mr. CARTER. Previous to that, there have been arrangements by which public health officers could go to at least two schools in the United States for training; is that not true?

Dr. ENDICOTT. Yes, when I first joined the Public Health Service, we had any given number of officers who were working for a master's or doctor's degree in public health at Johns Hopkins, at Harvard, at Michigan, and Berkeley. Most of my cohorts or many of my cohorts in the Public Health Service received such training as officers. This probably goes back to the turn of the century.

Mr. CARTER. Where did this money come from to send them?

Dr. ENDICOTT. This was part of the appropriation for direct operations. They were paid their salaries while they were detailed to schools.

Mr. CARTER. A large proportion of that was paid by the Federal Government?

Dr. ENDICOTT. All of it.

Mr. CARTER. How long?

Dr. ENDICOTT. It takes it back before my time, which would be more than 30 years. It probably started in the thirties.

Mr. CARTER. Then we have a long history for training and education in the health field; have we not?

Dr. ENDICOTT. Yes.

Mr. CARTER. Would you want to cut it back?

Dr. ENDICOTT. No, sir, this very day we have a number of officers attending those schools in formal, out-of-service training.

Mr. CARTER. What is the average salary of a public health physician?

Dr. ENDICOTT. I think Mr. Hatch has some ranges. Just off the cuff, I would say it is substantially below the average income of the practicing physician and would range perhaps, for a full-time public health physician in the State, local, or Federal Government at least, would range \$20,000 to \$40,000.

Mr. CARTER. Actually, I believe when we had the Emergency Personnel Act before this committee, it was testified that the people who would be sent into deprived areas would earn \$14,000 to \$16,000; is that not correct?

Dr. ENDICOTT. I think this was for a provision of health services—

Mr. CARTER. In the Emergency Personnel Health Act?

Dr. ENDICOTT. I was speaking for the State-local public health officer.

Mr. CARTER. This was a somewhat beginning salary; was it not?

Dr. ENDICOTT. The Federal top salary for civil service physicians at the present time is \$36,000, and I think that would compare favorably.

Mr. CARTER. How long would it take to reach that top salary?

Dr. ENDICOTT. 20 years.

Mr. CARTER. When he first gets out, his salary would be in the \$14,000 to \$16,000 range?

Dr. ENDICOTT. That is pretty close.

Mr. ROGERS. I think you are eminently correct. The Department of

Mr. CARTER. When he first gets out, his salary would be in the \$14,000 exactly as the gentleman said.

Mr. CARTER. Can these people be expected to pay, or are they able to pay the tuition and costs at Harvard or at Johns Hopkins or at Berkeley or Oklahoma, or wherever it might be from such a salary as that which they receive after their training? Are they able to do this?

Dr. ENDICOTT. Dr. Carter, I have been concerned for a long time about this very thing, about attracting top-rate physicians into public health and preventive medicine. I can't tell you what motivates them to make this career choice, but obviously, it cannot be money.

Mr. CARTER. Are we getting a sufficient number of highly qualified people and well-trained public health physicians?

Dr. ENDICOTT. I think the situation is improving. It was fairly desperate a few years ago, and all of us who were interested in public

health were concerned about our ability and the Federal Government to recruit competent, interested young physicians.

I don't think it would be accurate to say almost everyone was not concerned about the quality and quantity of physicians who were being attracted into State and local health departments. It did reach a point where most of the MD's enrolled in schools of public health were foreign nationals who were coming here for a few years of training to introduce modern public health into the developing nations.

So, I think it has been an area of concern, it still is an area of concern, and you have put your finger on one of the problems—the relatively low-income prospects for the physician in this area.

Dr. EDWARDS. I think, too, Dr. Carter, we have to recognize now that we no longer have the doctor draft. We had been interesting a small, but significant number of people each year into joining and staying with the Public Health Service via the doctor draft.

Now that we no longer have the draft, the number of these younger physicians coming into the Public Health Service will be less, I am sure. There are already indications of that and this situation may assume crisis proportions again before long.

Mr. CARTER. Do we have as many public health physicians as we really need? Could you give the number that we need and the number that we have?

Dr. EDWARDS. Do you mean positions or physicians, or overall?

Mr. CARTER. I am talking about physicians in this case, people who start out at \$14,000 a year.

Dr. EDWARDS. I can't give you the total number, but we can provide it. I can say all those positions are not filled.

[The information requested was not available to the committee at the time of printing—February 1974.]

Mr. CARTER. What is the average salary of a plumber in this country? I don't mean a urologist, by the way.

Dr. EDWARDS. I can't answer that—\$19,000 to \$20,000? I can't answer that, doctor.

Mr. CARTER. What are some of the duties of our public health officials? Start out and go over that a little bit.

Dr. EDWARDS. They vary all the way from patient care at the Clinical Center at the National Institutes of Health to physicians who are spending full time in administrative management positions, that is, the Indian Health Service.

Mr. CARTER. If we start out way down at the local level, we will have an official over a county, or series of counties, or over a portion of a city; is that correct?

Dr. EDWARDS. That is correct.

Mr. CARTER. What would be the duties of those men, as the usual thing?

Dr. EDWARDS. Dr. Endicott can probably speak more specifically to that than I can.

Dr. ENDICOTT. One of the fundamental duties is the enforcement of the laws and regulations governing control of communicable diseases, sanitation procedures, health education, the operation of certain clinics, such as venereal disease clinics, in some cities maternal and child health.

One of the new developments is perhaps in the area of population control. Most State jurisdictions have substantial operations in the field of control of marketing of foods and drugs. Generally, they are involved at the State level with common carriers, sanitation on buses, restaurants—a broad range of things.

Mr. CARTER. That is the way it was years ago when I served. We really had a great deal of work to do along that line. Child and maternal health were looked at carefully, particularly for those who were unable to pay their physicians and who received permission to come to us.

Of course, communicable disease control and sanitation, as you said, and supervision of personnel in restaurants—I am afraid that many of these fields are not executed properly today. We don't have the efficiency and dedication today that we should have.

I feel that our numbers are deficient and perhaps the training, and we also need more dedication in various fields. Of course, we must, as I see it, continue this support.

By the way, where do the personnel for our leprosariums come from?

Dr. ENDICOTT. It has been some time since I reviewed that, but I believe most of them are Federal employees.

Dr. EDWARDS. Most of these come from the Commissioned Corps.

Dr. ENDICOTT. I think in this country our own establishments are the best places to be trained. This disease has lost prevalence to the extent that there is really not much offered in the way of training in the advanced nations.

Mr. CARTER. But the personnel does come from the Public Health Service, both in leprosariums in Louisiana and the one on the island of Maui.

Dr. EDWARDS. That is correct.

Mr. CARTER. You have a number of public health physicians at NIH?

Dr. EDWARDS. We do.

Mr. CARTER. Do you have a sufficient number of nurses out there at NIH now?

Dr. EDWARDS. There was a shortage in the clinical center. I am not sure what the situation is at the moment.

Mr. CARTER. Is it not true you had to close part of the center out there and you are unable to take certain patients which you really need for study at the present time?

Dr. EDWARDS. That was true some months ago.

Mr. CARTER. It is true now.

Dr. EDWARDS. I was not aware of it now.

Mr. CARTER. Over at the Public Health Service hospital in Baltimore at the present time, where they have certain wards, how are you doing with them? Are you keeping them up or are you phasing them out? Some very important work has been going on there.

Dr. EDWARDS. As you know, the budget recommendation was to close the Public Health Service hospitals.

Mr. CARTER. We have legislation contrary to that at the present time.

Dr. EDWARDS. I recognize that.

Mr. CARTER. Is it not true, particularly in an area where we authorized hundreds of millions of dollars that you are cutting down on those services and treatment of certain diseases there at the Public Health Service hospital in Baltimore, and the equipment, facilities and manpower is less than adequate; is that correct?

Dr. EDWARDS. We think that the facility at Baltimore is an adequate facility when fully staffed.

Again, our position is this, Dr. Carter. We are here to manage and administer what the administration and the Congress—I am not trying to defend the closing or the cutting down on services. I will defend this: If we close down these hospitals, these patients will be taken care of adequately elsewhere.

Mr. CARTER. There is some very important treatment and research going on at Baltimore now.

Dr. EDWARDS. You are referring to the cancer program?

Mr. CARTER. I understand it is being phased out.

Dr. EDWARDS. No, it is not being phased out.

Mr. CARTER. It is being cut down.

Dr. EDWARDS. No.

Mr. CARTER. I beg your pardon?

Dr. EDWARDS. You may have information that I don't have.

Mr. CARTER. I do have.

Dr. EDWARDS. That may be, but we are transferring it to the University of Maryland.

Mr. CARTER. There are fields where we need more assistance and help than we are getting.

Thank you.

Mr. ROGERS. Mr. Heinz?

Mr. HEINZ. Thank you, Mr. Chairman.

Dr. Edwards, thank you for appearing before our committee. We are delighted to have you here. At the outset, I would like to indicate for the record some of the very real problems the administration's proposals can create for a specific institution and the prospective graduates of such an institution.

My own University of Pittsburgh is, in fact, 1 of the 18 schools of public health that you referred to earlier in your testimony. I thought it might be worth pointing out that the budget of the graduate school of public health, which is approximately \$4.449 million, is composed in part of Hill-Rhodes money, in part of an endowment, very happily, of close to \$730,000, sponsored research in the amount of \$1,577,000, total training grants in the amount of \$1,266,000; and the remainder being a transfer of university funds in the amount of \$869,000.

In fiscal 1973, the Hill-Rhodes authority that we are essentially talking about here, accounted for \$431,000 of that budget. This year, it will account for zero, and the difference is being made up from a university contingency of \$400,000, which incidentally happens to be the entire universitywide contingency fund. The most that will be available from that fund in fiscal 1975 is \$200,000, at most, \$100,000 a year after that and zero in fiscal 1977.

In addition we have heard testimony on the curtailment of training grants. As I mentioned earlier, training grants account for over \$1.2 million in this graduate school of public health. Of that, close to \$300,000 is being used on faculty salaries. All the \$430,000 that I referred to earlier from Hill-Rhodes is used on salaries.



If you look at the prospective university contingency funds for next year, for fiscal 1975, when the training fund will be depleted and you offset using \$200,000 of university contingency funds, you will find we will have a deficit at our university of \$530,760, just for faculty salaries.

This comes at a time when the financing of higher education is very tight. In fact, our university is having to cut its overall operating budget 6 percent. All faculty salaries are frozen. As a result, the university has notified 38 faculty members that their services may not be needed next year.

The reason I mention this is because there was discussion earlier about the likelihood of need for Public Health Service personnel. I think you as much admitted, although you said you really did not have accurate numbers, that we don't really have all of the Public Health Service personnel we need, in part because for years we have been training the public health professionals of other countries.

In this connection, therefore, so we can develop a reasonably rational policy on health manpower needs and in light of your statement that you intend to present to the committee your ideas at some future date, I would like to ask you some questions about where we are going, and perhaps we can form a partnership.

First of all, I would like to know what kind of data you do plan to develop or are developing on health manpower?

Dr. EDWARDS. There are a number of them, Congressman. I might list a few of them.

We are developing information as it relates to manpower needs that will come under any national health insurance scheme. We are trying to develop some manpower needs and utilization needs under HMO's. We have developed data on schools and not just medical schools, but the various allied schools of public health and other types of health manpower training data on these schools, their total enrollment programs.

We are looking at State and local roles in planning and funding allied manpower and health training. We are looking at the various approaches, the various different approaches to the delivery—utilizing different kinds of personnel for the delivery of health services.

We are looking at licensure and certification problems and how these can be improved and standardized to assist in the overall manpower effort.

There are a number of these things that we are just now beginning to pull together—I presume you could rightfully say why have we not done it before and I can't answer that question.

Mr. HEINZ. One of the things that I was listening for and did not hear explicitly was a survey of need for individual personnel in categories of need. Of course, the bill does address this subject in the form of a study that we requested you to make.

Dr. EDWARDS. We are looking into that.

Dr. ENDICOTT. I think this came up perhaps in an earlier hearing several years ago when we indicated our intention to establish a special division, a Division of Manpower Intelligence to assemble not on a one-shot basis, but on a continuing basis the essential data regarding manpower, supply requirements, distribution and utilization in the various categories.

Over the past 2 years, we have been putting fairly extensive resources into this new division which is in the process right now of completing its first major activity and establishing this now as an ongoing program.

As is the custom here in Washington, we use acronyms, and the acronym for this particular effort has been SOAR, supply requirements, estimations in various categories.

Mr. HEINZ. You say this is an ongoing program of identification?

Dr. ENDICOTT. Yes, and it has a fairly substantial budget which the House approved in the President's 1974 budget request.

The first task we undertook was a more definitive determination of the actual existing supply—those who are actually working, for example. The validity of the statistics is quite good in the senior professions of medicine, dentistry, less adequate nursing and poorest of all in allied health. That is, what is the nose count right now.

The next thing we undertook was an estimate of the annual capacity of the system to produce various categories of health workers. Here again, the best figures are in the senior professions. The least accurate are in the field of allied health where we now know how many programs there are and how many students in academic institutions but we still don't have good figures for schools that are hospital based.

Given an existing notion and an accurate estimate of what the current system can produce overtime, the next thing to turn to is an estimate of current shortages. Here the most accurate figure you can get hold of is budgeted vacancies. Here again, depending on the field, we have solid figures and then they get pretty vague and trail out.

Then you have to set up a series of assumptions as to what the demand may be for services in the future. This gets vague because the demand will depend on what money is available to purchase the services, the extent of sophistication in terms of the public and what it will demand for services, and the system or systems which will be in operation in the future to deliver these services.

So it proceeds into demand and requirements for 1980 or 1985, but the figures then get pretty soft.

We have assembled through consultants and the use of contracts, the very best brains we can find in this country and to some extent abroad, to help us with these determinations and to set into motion a system which a few years downstream will avoid the kind of frustrating exchange we have had today in terms of numbers, statistics.

I am hopeful that in a few years we will have a regularly operating system available in this Government which most people will accept as reliable estimates of existing supply, output characteristics, and a range, at least, of future needs, demand costs.

Mr. HEINZ. I would assume, therefore, the data you are talking about and are in the process of developing would be available to this committee and its staff on an ongoing and current basis? Would that be possible?

Dr. EDWARDS. Absolutely.

Mr. HEINZ. Related to that, since I think you are in the process of designing what I would call an information system, would you, Dr. Edwards, or the other people with you, be willing to work with this committee and its staff so that we can develop an information system

that will serve all our needs? Would you be willing to assist the committee in that regard?

Dr. EDWARDS. Absolutely, Mr. Heinz. I think if the Congress and the executive branch will come up with any kind of health manpower strategy, this has to be done. I can give you my assurance that you will have our total cooperation.

Mr. HEINZ. You know the bill we are discussing today does, in a sense, give you a boost in gathering data, designing a system to give it in terms of particularly the NAS study. Do you have any comment on that bill?

Dr. EDWARDS. Let me emphasize our criticism is not of the bill per se as it is perhaps the timing of this particular effort.

Mr. HEINZ. There is one other question I would like to have your comment on. In the bill on page 10 and on page 17 and again on page 20, we, in effect, have language in the bill which says that you will transmit, you being HEW, to us your legislative recommendations; line 20, page 10, line 11, and on page 20.

As I understand our Constitution, it is only the President who can make a legislative recommendation to the Congress. Nobody else from the administration can actually make a legislative proposal, per se. We can have discussions about legislative proposals, but you can't, as I understand the relationship and separation of powers, you can't properly propose to us any such thing.

Therefore, you might want to study and comment either now or later on those portions of the bill that I have just pointed out. They seem to me not entirely proper.

Dr. EDWARDS. I would have no comment at this particular point.

Mr. HEINZ. I would be happy to yield to the gentleman from Kentucky.

Mr. CARTER. Thank you, sir.

Many of our renowned specialists in the treatment of cancer have been trained at NIH; is that not correct?

Dr. EDWARDS. That is correct.

Mr. CARTER. How are your facilities now for training people at NIH? Are they as good as they were a few years ago or have they gone down?

Dr. EDWARDS. Again, you are speaking primarily of the Clinical Center. I think the quality of education, the quality of care out there today is as good as it has ever been.

Mr. CARTER. Even with your shortage of nurses?

Dr. EDWARDS. When we had that shortage of nurses, which we may still have, it necessitated closing down some wards, but it had no effect on the quality of care.

Mr. CARTER. I am not talking about the quality of care. I am talking about the quality of training. Of course, you have to have patients in order to preserve the quality of care and permit learning and training by the physicians; is that not correct?

Dr. EDWARDS. That is correct.

Mr. CARTER. You have done a great deal and I think, doctor, we have to restore this to its former position of preeminence in this country. Many great men have been trained there; is that not correct?

Dr. EDWARDS. Yes; in many fields, not just in cancer.

Mr. CARTER. Don't you think we should continue this?

Dr. EDWARDS. Absolutely.

Mr. CARTER. Why, then, have we let it go down?

Dr. EDWARDS. I don't share your view—

Mr. CARTER. You admit the number of beds has been diminished.

Dr. EDWARDS. The number of beds has fluctuated.

Mr. CARTER. And you admit there is a shortage of nurses?

Dr. EDWARDS. Periodically, not at all times.

Mr. CARTER. You have just not been able to supply enough; isn't that true?

Dr. EDWARDS. Have not been able to supply what?

Mr. CARTER. This bill that we have had under consideration would help train nurse clinicians. Have they been helpful throughout our country?

Dr. EDWARDS. Mr. Hatch tells me this particular bill we are considering today has nothing to do with nurse clinicians.

Mr. CARTER. Allied health personnel?

Mr. HATCH. The nurse clinicians are trained through—

Mr. CARTER. Say, paramedics.

I believe the same philosophy would carry over to the other bill. They do very great work in this field and I have been in a position to observe it.

I think we are letting ourselves down. Some of the greatest men in this country, men who are active in the several centers throughout the country treating cancer, were trained there. We have to have a center where we can train these people and other centers now are engaged in that work and doing great work.

I yield back to my distinguished colleague from Pennsylvania.

Mr. HEINZ. One last thing, if I may. I would like to take this opportunity to remind Dr. Zapp that on March 23, 1973, with respect to a letter I wrote you regarding the National Health Research Fellowship and Traineeship Act of 1973, I requested that you respond to a list of eight questions. These questions, I am sorry to say, were never answered and they are in many ways material to the Public Health and Allied Training Act that is before us now, because the questions are of the same nature, although they related to different categories of personnel; namely, biomedical research and training requirements.

I think it would be helpful if you would take a look at the questions that I originally asked and respond to those questions and particularly take the opportunity to give us any comments in writing substituting for the words researchers and teachers, public health and allied health personnel as defined in the bill.

Dr. ZAPP. I am glad you raised the question, Mr. Heinz.

Mr. HEINZ. I am sure you are delighted.

Dr. ZAPP. Obviously. It exemplifies the dialog going on here this morning and the same thing I saw when the current allied health legislation was being debated. We have communicated with your staff frequently on this and your questions have been perceptive, but they were questions requesting information in ways that they have not been cataloged before.

The NIH and the people at the Institutes are still working because we still think these are good questions. There was simply no way that that material could be properly generated and authenticated.

Mr. HEINZ. You can't answer whether the administration made any projections of future manpower needs. Is that a difficult question?

Dr. ZAPP. I don't think that was one of the eight questions.

Mr. HEINZ. It was question No. 4 on my list of eight questions.

Dr. ZAPP. If you want us to submit the questions, we have answers to at this time, we would be pleased to do it.

Mr. HEINZ. What I am driving at is there are certain kinds of questions here you can answer and there are others where you can indicate that some information is available and not other information. The reason this is pertinent is if we are to have a partnership with you in designing an information system, you have to share with us what your information is and is not.

Otherwise, we might as well forget about any partnership in this undertaking. We all agree this is a very necessary undertaking, to find out what our requirements and resources will be.

Dr. ZAPP. I will agree with you.

Mr. HEINZ. I will expect a detailed answer to my letter very shortly.

Dr. ZAPP. The parts where we have the answers.

Mr. HEINZ. And I would hope you would indicate the problems where you can't supply the actual information and indicate quite thoroughly where you are in working toward getting that information or whether you don't think that that information is worth getting. I would appreciate that.

Dr. EDWARDS. We are trying to pull that information together right now and you obviously have every reason to expect our cooperation in sharing this information. If you contact me, I will see what can be done.

Mr. HEINZ. Thank you, Dr. Edwards.

[The information requested was not available to the committee at the time of printing—February 1974.]

Mr. ROGERS. Let me sum up a few things here now.

Has anyone said that there is not a real need and a real shortage in the allied and public health field? Does anyone dispute that?

Dr. EDWARDS. I think I would, Mr. Chairman, yes.

Mr. ROGERS. On what information do you base that? This is contrary to every bit of information this committee has ever had.

Dr. EDWARDS. Before you make a statement like that, you have to take each category individually.

Mr. ROGERS. Let's do that.

Dr. EDWARDS. I don't have them in front of me.

Mr. ROGERS. I can give you this study which is from your own Department. It was published in 1970 and it says total allied health manpower shortage deficit, 1975, 343,000; in 1980, 423,000. This does not even project the fact that you are going to propose a national health insurance program, of which the Secretary has spoken.

Would you think there would be more demand for health personnel if a national health insurance program is enacted, as the administration proposes?

Dr. EDWARDS. I don't think there is any question there would be an increased demand.

Mr. ROGERS. Of course, there will. I understand your Department is going to propose this. Is that true or not?

Dr. EDWARDS. Propose what?

Mr. ROGERS. A national health insurance program.

Dr. EDWARDS. Absolutely.

Mr. ROGERS. Will it be done this year?

Dr. EDWARDS. The recommendations and plans from the Department of Health, Education, and Welfare will be submitted to the Office of Management and Budget this year.

Mr. ROGERS. So we know there will be a greater demand for health personnel if we enact what you, yourself will propose?

Dr. EDWARDS. That is correct.

Mr. ROGERS. I ask unanimous consent to put into the record this letter from the University of Hawaii.

[The letter referred to follows:]

UNIVERSITY OF HAWAII,  
SCHOOL OF PUBLIC HEALTH,  
OFFICE OF THE DEAN,  
January 29, 1973.

HON. PATSY T. MINK,  
*Representative in Congress,*  
Cannon Building,  
Washington, D.C.

DEAR CONGRESSWOMAN MINK: On July 18, 1972, we wrote to provide you with a status report on our school and in that letter we presented an optimistic picture of progress. Now I must seek your action in a matter which most certainly obliterates that bright projection of achievement.

The Federal legislative authorization for Sections 306, 309(a) and 309(c) of the Public Health Service Act will expire on June 30, 1973. Section 306 of that Act provides trainee support for health science students, including public health students; Section 309(a) provides support for faculty staff and related resources for health service training programs, including public health; and Section 309(c) provides general support for the 18 schools of public health including ours at the University of Hawaii.

In his 1974 budget message revealed on January 29, the President has indicated his intention not to support legislative renewal and his apparent low priority for health training programs by not providing resources for these programs which have been a mainstay of health school operations over the years.

The following information provides insights into the effects of such an action:

Percent of University of Hawaii School of Public Health instruction budget supported by Sections 306 and 309 Federal Resources 39% (\$647,286).

Percent of University of Hawaii School of Public Health faculty supported by Section 309 Federal Resources 19% (9 faculty).

Percent of University of Hawaii School of Public Health staff supported by Section 309 Federal Resources 51% (15 staff).

Percent of University of Hawaii School of Public Health students supported by Section 306 Federal Resources 66% (94 students).

The following are the predicted effects on Hawaii and the Pacific Basin of the President's action:

Reduce by 33% (47) the number of students that can be trained at this institution.

Reduce by 50% the amount of service effort that the School can provide to the community.

Require the reduction in force of 22 faculty and 20 staff.

Reduce by 50% the health services research effort of the School.

Relegate the University of Hawaii School of Public Health to a fairly impotent level of effectiveness.

Needless to say, this action will also have similarly disastrous effects upon the 17 other schools of public health across the nation and in addition, will have related effects on a majority of the allied health training institutions throughout the country.

We are, of course, working with our professional societies—the Association of Schools of Public Health and the American Public Health Association—in

an effort to present combined data to the attention of the Administration and Congress, but I felt it important to bring the full impact of this projected action on the State of Hawaii to your personal attention.

As a matter of legislative record, a bill to renew the authorization for Sections 306 and 309 was passed by the Senate during the last Congress. A companion bill in the House did not come to a vote before the end of the session.

Needless to say, we request your assistance in (1) making the strongest possible representation for renewal of the legislation, and (2) providing an annual authorization of resources for those sections as proposed on May 2, 1972 by the President of the Association of Schools of Public Health before the Subcommittee on the Departments of Labor-HEW, Committee on Appropriations, U.S. House of Representatives:

Section 306-----	\$12,000,000
Section 309(a)-----	11,000,000
Section 309(c)-----	15,400,000

I am also taking the liberty of enclosing a brief narrative statement on the continuing role of public health in our health care system which may be useful in the legislative deliberations.

Sincerely,

JERROLD M. MICHAEL,  
*Acting Dean.*

Enclosure.

#### PUBLIC HEALTH—A SOCIAL DEFINITION

(By Jerrold M. Michael, University of Hawaii)

When one looks at a large gathering of public health workers, there is a rapid realization that it represents many different disciplines and specialties. They are environmentalists, epidemiologists, physicians, nurses, health administrators, and many other things. They are nutritionists, too, and family planners, microbiologists. Their immediate areas of involvement ranges from cellular research of social action. Almost everyone, however, is somehow a part of what is called public health—and the availability of public health workers is a matter of grave concern in our dynamic society.

The essence of public health is to achieve articulation between a society's health needs and its resources. In some cases, this means providing direct patient care. In others, it means protecting the individual from health hazards or helping him to achieve healthier ways of living. The distinguishing aspects of public health, in any case, is its locus of activity at the *interface* of public needs—in terms of health, survival, and the quality of life—and the society's resources—human, social, technological, and economic. This is the bond all public health workers share as promoters of the public health.

By its very nature, public health is a changing field, since it is affected by changing public needs, on the one hand, and changing resources, on the other. Public health workers are all aware of the growing concern with personal health services and the social aspects of broad health matters, in addition to the classical; public health concerns of communicable disease and environmental sanitation. They are also aware of the changing categorical emphasis the field has undergone as science has mastered the control of various major diseases. Emerging issues, such as family planning, health financing and noise have begun to supplant in priority, earlier ones, such as tuberculosis and polio.

Today, two additional kinds of forces are impinging on the public health interface and affecting almost everything done. First, in addition to the changing health needs, the health field is confronted by new public expectations and demands. These affect not only *what* is done, but *how* it is done. In the past, it has been largely up to the health professional to define the needs—and the ways of meeting them were those which the professionals, considered to be the most efficient and effective. The new stress on meeting public expectations, and the attendant growth of public participation in decision-making, have created a whole new public health "style." At the same time, this has served to re-emphasize and rejuvenate the traditional social commitment of public health.

The other major change facing the field is on the "resource" side of the interface. The miracle of technological advances is almost a cliché. Many new pro-

cedures, some of them requiring whole new kinds of technologists, have revolutionized both prevention and treatment. In 1900, three out of every five health professionals were physicians, but now there are almost  $3\frac{1}{2}$  million persons in health occupations and only a tenth are physicians. With this growing complexity, there are growing costs as well. To cover these soaring costs, the sources of funding have broadened and federal money, especially becomes more and more critical. In addition, with capabilities and health programs expanding in all directions, priority-setting at all levels has become a necessity rather than a refinement for determining what activities are funded. In the past, there was considerable certainty about funding—how much any group would have and for what activities. There also was relative local autonomy in deciding how the money would be used. Today, however, the health industry is constantly enticed by earmarked funds of various kinds, that become available today and are allocated on the basis of grant applications submitted tomorrow. Operations are regulated by requirements that various services or standards be included in certain programs. If the public health discipline is to be effective for society, it must be effective in dealing at the levels where these decisions are made. Public health workers must be politically aware—and must serve as advocates, in their politics, for the public they serve.

Mr. ROGERS. In particular, I call your attention to the following information from the University of Hawaii:

There are the predicted effects on Hawaii and the Pacific Basin of the President's action: One, reduced by 33 percent the number of students that can be trained at this institution, reduced by 50 percent the amount of service effort the school can provide to the community; require the reduction in force of 22 faculty and 20 staff people and reduce by 50 percent the health service research effort of the school. Finally, relegate the University of Hawaii School of Public Health to a fairly ineffectual level of effectiveness.

Now, that is a rather strong indictment of the plan or the substitute which you are asking us to just simply turn over to the Department of HEW by ignoring this law and ignoring this program. That, I might say, is exactly the same thing your predecessor told the Congress last year.

Secretary Duval asked the Senate Committee not to extend public health and allied authorities and suggested that we wait until 1973. Let us look again. Let us do something. Now, we are having a repeat of the 1972 testimony here in 1973.

Dr. Endicott says, "Oh, well, we are going to share a lot of information with you." We are going to do a lot of studies and I am sure the intent is good, but that does not solve our problem now and the Congress has to address the problem now. Congress cannot wait until somebody may come together and get something later.

Here you say you are going to share it with us, but you have even stopped publishing these figures. This is rather a frightening approach to those of us who feel the problem is mounting and not lessening especially with our population on the rise and with propositions of national health insurance in the wings.

Already the figures we have had from your department show tremendous shortages. Then we hear from the schools of public health, and there are only 18 of them, that they will be in dire circumstances. Even your own testimony this morning shows it, but you say, oh, well, maybe some local governments can come up with some aid. Seven of those 18 are not even public schools; isn't that correct?

Dr. EDWARDS. That is correct.

Mr. ROGERS. Are the State governments going to come in and support private schools? Could we expect them to?



Mr. HATCH. I believe the University of Pittsburgh receives some support.

Mr. ROGERS. What about the others?

Mr. HATCH. I don't believe they do.

Mr. ROGERS. And probably wouldn't.

Mr. HATCH. I can't answer that.

Mr. ROGERS. The experience has been that they have not.

Mr. HATCH. That is right.

Mr. ROGERS. It is well to talk about what we are going to do and how the marketplace is going to take care of things. But I am concerned that we had better address the problem now. Then we talk about this loan program and how you are going to turn it over. We have always kept health programs for training within the health context. Now, the proposal is to let the Department of Education come in and do it all.

I think we are seeing that banks—and we have checked a number of banks over the State and a number of schools—simply are not going to handle the problem in the health field.

In fact, in your own bulletin published July 23, 1973, from the Department of Health, Education, and Welfare, to all student financial officers of the guaranteed student loan program, it says: "During the last few months, there has been a marked decline in both the number and dollar volume of loans made to students as compared to a year ago."

You can go right on down showing that the program is decreasing. We are not meeting the needs. I think Mr. Weinberger and Mr. Carlucci have some idea that just because doctors get out into private practice that they make a lot of money. They don't understand public health doctors don't make a lot of money. We have gone through that. They start out at \$14,000 from the Department of Labor. They are not making \$40,000. And Dr. Endicott says in the Government maybe they could get up to \$36,000 after 20 years.

Well, I don't see much point in pursuing this.

I do want to touch on this educational initiative award business. You say that is double the amount in 1972-1973-1974?

Dr. ENDICOTT. I will have to check that.

Mr. ROGERS. Give us the specific figures on that, please.

Dr. ENDICOTT. In the 1972 appropriation, \$20 million; the House allowance and President's budget for 1974, \$46.5 million.

Mr. ROGERS. How many of these educational centers do you have?

Dr. ENDICOTT. The Area Health Educational Centers, we have 11.

Mr. ROGERS. What do they do? How do they function?

Dr. ENDICOTT. They are modeled after the concept advanced by the Carnegie Commission. The basic concept is to increase educational opportunities—

Mr. ROGERS. How?

Dr. ENDICOTT. The Area Health Educational Centers were initiated to upgrade the quality and delivery of health services by establishing satellite and service institutions with the responsible organization being a university health science center and the area health education center being one or more community facilities removed some geographic distance from that center.

Mr. ROGERS. In other words, it is trying to get a university medical center to spread its knowledge around; is that about what you are saying?

Dr. ENDICOTT. It is more than knowledge. It is an actual movement of faculty, facilities, and programs into a new nucleus geographically remote from the parent institution. In a Western State, for example, where the university health sciences center may be located perhaps in the center of the State, there might be one, two, three, or four population centers perhaps several hundred miles from the university. One or more of these communities has a hospital, and perhaps another type health facilities, such as a junior college or two to establish a new education nucleus for a variety of health personnel. The minimum requirement of these AHEC is that there at least be a residency program in family practice; that they also offer training in various fields of allied health and nursing as well as continuing education for health personnel located in that community; and that they participate with and perhaps guide the development of new systems of not only education but also delivery of and new types of services in that geographically remote area.

Mr. ROGERS. Would they deliver the services to those outreach places?

Dr. ENDICOTT. Yes; although by and large they derive the funds for the delivery of services from some other source—community insurance carriers, medicare and medicaid, but the point is they offer services which have not been available before in that community.

Mr. ROGERS. In other words, you are saying some of these funds would be for delivery of service?

Dr. ENDICOTT. The intent of our program is that we look to other sources for reimbursement of services.

Mr. ROGERS. Then funds don't go to services then; is that what you are saying?

Dr. ENDICOTT. I was trying to give you an accurate answer. To the extent that the area health education center budget provides a part or all of the faculty salary in the clinical area, perhaps a physician clinician, perhaps some of the nurse-teachers and others who, as a part of their educational activity, demonstrate on patients, they obviously provide services. There would be some spillover, the exact number of which is hard to determine.

Mr. ROGERS. Isn't that contrary to your policy, now, Mr. Secretary? You are not supposed to be concerned with services. Are you going to let a new program get started?

Dr. EDWARDS. It is not our primary objective, but it is to clearly define—

Dr. ENDICOTT. If you come back to the medical school of which this is a satellite, inevitably the faculty salaries to some extent will underwrite the provision of services. It is an accountant's nightmare.

Mr. ROGERS. Have you established any grants?

Dr. ENDICOTT. Yes.

Mr. ROGERS. How many allied health personnel and how many doctors are you producing from these programs?

Dr. ENDICOTT. I would be happy to supply that information for the record, because this, obviously, is an important component to the application and the progress reports and I did not come prepared to give that information.

Mr. ROGERS. In the justification, did you require them to show number of personnel, and training, and so on?

Dr. ENDICOTT. It is by category.

Mr. ROGERS. Can we have it this afternoon? I presume you have it since they have submitted it.

Dr. ENDICOTT. Yes.

Mr. ROGERS. We would like to have that for insertion in the record this afternoon.

[The following information was received for the record:]

NUMBER AND TYPES OF STUDENTS BEING TRAINED IN THE FIRST YEAR OF THE AHEC PROGRAMS

The estimated number of students receiving training in the first year of the AHEC contract awards is 3308. These students are enrolled in institutions which have Bureau of Health Resources Development contracts for the implementation of the Carnegie-type AHEC model. The following table gives the estimated number of students by category and by level of training.

AHEC ESTIMATED STUDENT ENROLLMENT, CONTRACT YEAR SEPT. 1, 1973-SEPT. 1, 1974

Category	Level of training	
	Undergraduate	Graduate
Allied health.....	689	
Dental.....	59	
Nursing.....	1,377	
Medicine.....	566	524
Other.....	93	
Total.....	2,784	
Grand total.....		3,308

Mr. ROGERS. How many Public Health Service doctors do you produce out of this?

Dr. ENDICOTT. I doubt this would be involved.

Mr. ROGERS. I think you are right, but yet this is your substitute for helping the public health schools. We are going to do a lot through this educational fund and I don't think it is going to help very much.

Dr. ENDICOTT. We did not convey accurately our intention—

Mr. ROGERS. Just a minute now. Let's clear this point up.

Dr. ENDICOTT. Let me try, to go back to the Area Health Education Center, the intent here is not to increase the output of public health personnel per se, but of family practitioners and various supportive personnel involved in the provision of primary care. The authority is quite broad, sufficiently broad that it will enable us to make awards not just to Area Health Education Centers, but also to schools of public health, schools of business administration, and so on, for the provision of training—

Mr. ROGERS. In the area of education?

Dr. ENDICOTT. To allied health.

Mr. ROGERS. Area educational center approach?

Dr. ENDICOTT. No, sir, we do not propose to increase the number of Area Health Education Centers in 1974 and the budget will remain approximately at the level of \$10 million in 1973. So these are new activities which we propose under that broad authority.

Mr. ROGERS. This will not have any effect basically on the law we are considering now, will it?

Dr. ENDICOTT. Let me answer it this way, Mr. Chairman. Given

broad authority and specific authority, where there is the option as to which of the two you would elect to use in a specific instance, the existing law affords us the opportunity to do it either way.

Mr. ROGERS. The schools of public health have no way of knowing what option you are going to choose. How can they continue to operate when they don't know from moment to moment whether at your decision or your option, you will try to do something for one or two of them or in some other area.

Should we not plan and set the law so the people can depend on it. Don't you think that is a pretty good principle?

Dr. EDWARDS. As a general principle, I think it is a pretty good one.

Mr. ROGERS. I am concerned that the banks are not really responding. Also, because of the legislation, I think they give only to first-year undergraduates. I think we had better keep our program on health training as we have it until we come up with a specific plan. I think we should continue this legislation until we come up with a specific plan. I think we had better rely on the figures HEW gave us before you give us specific changes to change them.

This would be my response in asking us to wait and do nothing. I think the committee is of the temper to move to begin to answer the problem in response to the need.

I know you have just come aboard, Mr. Secretary, and we understand that, and it is going to take some time for you to get your feet on the ground. We hope you will look at these problems and then we look forward to working with you to solve them.

In the meantime, the Congress, I think, will move ahead in making sure that the health needs of the Nation will be answered.

Thank you so much for being here. We appreciate your presence.

The next witness is Dr. Thomas Hall, professor, University of North Carolina, School of Public Health, Chapel Hill, N.C.

We also have Dr. C. Arden Miller from the School of Public Health of the University of North Carolina.

Since you gentlemen are colleagues, you may wish to come forward and be at the table together, or you may proceed singly if you prefer.

May I say that our distinguished colleague from North Carolina, Congressman Preyer, had to leave because of a commitment, but he did want me to extend his greetings and say he was delighted to have you here.

Before you begin a statement, I have a copy of a letter from Dr. John R. Kernodle, the American Medical Association, chairman of the board of trustees, dated April 24, 1973 to Dr. B. G. Greenberg, dean of the School of Public Health, Chapel Hill, University of North Carolina.

I should like to quote from portions of it and I will ask unanimous consent for the entire letter to be made a part of the record.

[The letter referred to follows:]

AMERICAN MEDICAL ASSOCIATION,  
Chicago, Ill., April 24, 1973.

Dr. B. G. GREENBERG,  
Dean, School of Public Health, The University of North Carolina, Chapel Hill,  
N.C.

DEAR DR. GREENBERG: Thank you for your most comprehensive letter of April 2, 1973, and, of course, your visit to my office the preceding Saturday.

The entire subject of categorical grants was discussed at length again by the Board of Trustees last week in Chicago. Numerous letters similar to yours were received by other members as well as by myself in regard to the Public Health Schools. At this time, it was decided to maintain a status quo in regard to support for the President in his fiscal responsibility program; thus, further support for the Public Health Schools was not forthcoming at this meeting. There were quite a few discussions in regard to past activities by Deans and graduates of the Public Health Schools in regard to their attacks on the American Medical Association. Certainly this did not help the outcome in this particular area. I hope that some change in the legislation can take place so that you will be able to obtain sufficient funds to continue in operation. Again, I reiterate at this time support is for continuing help and aid to the President in his fiscal responsibility drive.

Yours sincerely,

JOHN R. KERNODLE, M.D.,  
*Chairman, Board of Trustees.*

Mr. ROGERS. In part, the letter reads as follows:

Thank you for your most comprehensive letter of April 21, 1973, and, of course, your visit to my office the preceding Saturday. The entire subject of categorical grants discussed at length again by the Board of Trustees again last week in Chicago. Numerous letters by yourself were received by myself and others regarding public health schools. At this time, it decided to maintain a status quo in regard to support for the President in his fiscal responsibility program. Thus, further support for the public health schools was not forthcoming at this meeting.

This is the sentence that disturbs me:

There were quite a few discussions with regard to past activities by deans and graduates of the public health schools in regard to their attacks on the American Medical Association. Certainly this does not help the outcome in this particular area.

I hope that some change in the legislation can take place so that you will be able to obtain sufficient funds to continue in operation. Again, I reiterate at this time, in helping support aid for responsibility to continue schools for public health, the AMA, even though there is a shortage, evidently felt that the AMA had been attacked by deans and graduates of public health schools. Is that the thrust of this letter that was given at North Carolina, at the School of Public Health?

**STATEMENTS OF DR. C. ARDEN MILLER, PROFESSOR, UNIVERSITY OF NORTH CAROLINA, SCHOOL OF PUBLIC HEALTH, DEPARTMENT OF MATERNAL AND CHILD HEALTH, CHAPEL HILL, N.C.; AND DR. THOMAS L. HALL, PROFESSOR, UNIVERSITY OF NORTH CAROLINA, SCHOOL OF PUBLIC HEALTH, CHAPEL HILL, N.C.**

Dr. MILLER. Two thoughts occur to me. One questions the expectations of public health. Is it expected to serve the AMA or the American public? Dr. Kernodle would answer that question differently from what I would or perhaps you would.

The second issue that occurs to me is that American doctors like myself, may wish to think deeply about the role the AMA is playing in trying to expand its membership which now consists of less than half of American doctors. The association claims to welcome dissent, and offers to represent different points of view within its organization. The letter would seem to indicate that such is not always the case.

Mr. ROGERS. Yes, I find this a rather amazing letter.

The second bells have rung. I will have to recess the subcommittee for about 5 or 10 minutes. If you will bear with us, we will continue the hearings in about 10 minutes.

The subcommittee will stand in recess for about 10 minutes.

[Brief recess.]

Mr. ROGERS. The subcommittee will come to order. We will resume our hearings on H.R. 9341, Public Allied Health Personnel Act of 1973.

Dr. Miller, you may resume.

Dr. MILLER. If you are willing, Dr. Hall and I will present our testimony jointly.

Mr. ROGERS. You can place your statements in the record or proceed however you prefer.

Dr. MILLER. Mr. Chairman, in March of this year, it was our pleasure to appear before this committee on behalf of the American Public Health Association to give our support to a bill that has extended selected authorizations of the Public Health Services Act.

One of the justifications for urging this extension was that the administration's proposal to terminate those authorities left many universities and many agencies concerned with health programs poorly prepared to develop substitute and replacement programs because, for the most part, the problems that those programs were intended to cope with still existed. We appealed for an opportunity for more extensive study during which time the authorizations would be continued in their present form.

As part of our pledge to engage in further study, a number of us led by my colleague, Dr. Hall, at the University of North Carolina have engaged in what we believe to be an important study on health manpower needs in public health. I think it important to emphasize that this ad hoc study is voluntary and nonfunded. It is not complete but it is the best we have been able to put together to analyze the need for personnel and to analyze our capacity for meeting that need not only at the University of North Carolina but on a national level.

The report of the need for public health manpower and our capacities to meet that need is not quite in complete form. We shall have it for you in complete form within a week or two; it will consist of about 100 single-spaced pages analyzing each separate category of recognized public health manpower need. We will make the final version available as quickly as possible.

At the conclusion of my remarks, Dr. Hall will attempt to summarize for you some of the main findings.

Mr. ROGERS. That would be very helpful.

Dr. MILLER. Before presenting the summary, it would seem to me appropriate to place the whole public health manpower problem in the context of certain policy considerations. A major consideration relates to neglect of public health. As far as we can determine there has been no thorough review of public health manpower needs within the past decade or decade and a half. During this same period there have been countless studies on how many doctors, nurses, and other kinds of personnel are required, and how they can be recruited and paid for in order to render medical care.

The absence of intensive study about public health manpower is reflective of a national policy which has tended to give almost all of our national priorities to medical care and the treatment of sick people, and very little emphasis on how to keep people healthy.

The Nation continues to seek good health largely through emphasis on a market system of medical care emphasizing curative service programs, even though evidence abounds that the only rational and economic approach to health is to preserve it.

The major emphasis and expertise in this country on preserving health, and fostering the conditions to maintain it, resides in schools of public health. They alone among educational institutions have succeeded in bringing together experts from social behavioral, and biologic science in order to examine the full range of determinants of health. They represent an emphasis which, in the national interest, must receive more and not less support and attention. The major advances in health over the past century have derived from public health measures and not from reactive programs of improved medical care. There is good evidence to suggest that the most pressing health problems of the country continue to relate to a quality of life rather than to a quality of medical care.

What good health we enjoy today we can attribute in large measure to 19th century principles of sanitation, nutrition, and improved working conditions.

The 20th century is faced with some new public health problems, some of them still related to nutrition, pollution, and transportation. We are poorly prepared to cope with them. One of the reasons is because these matters have not been a subject of national priority in Government policy.

A second major consideration: Major determinants of health, such as nutrition, housing, recreation, education, and harmonious ecological relationships fall outside medical purview, which cannot compensate for deficiencies in these matters by unlimited expansion of medical services, no matter how they are organized or financed.

Increasingly, schools of public health participate in the education of lawyers, public administrators, teachers, and service personnel from all fields whose work in some way impinges on the well-being and, hence, on the health of the public. Schools of public health continue their important mission of training identifiable career workers in public health jobs. But an increasingly large portion of their responsibility consists of improving the expertise and health content of other kinds of professionals and community service workers. Schools of public health require basic support to continue these important functions.

We would not minimize for a moment the importance of the educational programs in departments of public administration, business administration and community medicine in preparing manpower for the health fields. Interestingly enough, a fairly large proportion rely on faculty members who received their training in schools of public health.

A third point: The administration's proposed budget tremendously increases the demand for nonclinical professional health manpower but offers no program for providing it; in fact, existing supports are cut back.

Decentralization of services to State and local levels requires that these units of government directly engaged the services of many new people skilled at planning, developing, implementing, and evaluating health service programs. Guidelines and supervision previously provided at the national level for the entire country must now be prepared and implemented at every local level of government. This emphasis is recommended at many points in the budget message and is consistent with the administration's desire to bring Government closer and more responsive to the needs of the people. If we want more local government, then we need more local competence, trained officials, et cetera. It is an emphasis which will not conserve public health manpower; it will require substantially increased numbers. In the long run, this increase in personnel and their increased emphasis at the local level may bring enormous benefits to our public health agencies and programs. But the workers are simply not now available. Schools of public health need basic support to maintain and, if possible, expand, their educational and training programs in order to meet growing demand.

Four: Even though a pressing local demand exists for additional public health manpower, no mechanism exists, nor can one reasonably be established, for training this manpower at the local level—it is a national obligation.

Schools of public health are not now and cannot reasonably be regarded for the future as educational institutions subject exclusively to local authority and funding. They are national institutions, drawing their students from a national pool, and providing their graduates to serve a need predominantly identified with national and regional service programs. Graduates entering careers in local and State programs look for opportunities not only in their own States but ordinarily in all surrounding States.

Each State simply cannot have its own school of public health—one now has three, and most States have none. Currently, no State provides more than about 20 percent of the budget for its school of public health. The remainder comes from national sources.

A substantial portion of graduates serve and will continue to serve in Federal and regional establishments. The expanded expectation of many of the administration's health programs gives assurance that this need will continue.

Five: The administration budget urges innovative practice to improve public health but withdraws the basic support from institutions and professionals from which the innovations would come.

Schools of public health require Federal support, like other professional schools, not only to maintain and expand health professional manpower, but to respond to the 1974 budgetary emphasis on development of innovative practices. Innovations must derive out of faculties and staffs who are assured of basic support. Only when that basic support is given will there be time and talent available to develop the innovations desired by the present administration and by the authorizations of the Comprehensive Manpower Act.

Six: Public health workers are not elitists; they are drawn from the full socioeconomic spectrum of the country, and they are committed to careers, usually for public agencies, that do not provide high



salaries; students preparing for these careers need support and inducements; a loan program will not suffice.

Special effort should be made to provide for students studying public health. They are some of the prime candidates for lifetime careers in the health agencies of underserved areas. Of all professional students, those in public health are least likely to be attracted into financially rich careers. Public health students require scholarships as well as loans.

Seven: Many proposals in the administration budget cannot meet expectations without substantially increased technical assistance in matters of public health.

With respect to the health maintenance organizations, the fiscal year 1974 budget states that, "These locally organized direct service plans provide preventive and treatment services on a prepaid voluntary basis." Money is proposed ". . . to plan development and facilitate 93 planning projects, 67 development projects, and 30 operational programs."

In terms of national need and earlier expectations, this represents a modest undertaking. The budgetary message specifically states that ". . . technical assistance will be offered to HMO development." If HMO's are, in fact, to maintain health rather than to treat disease, a substantial portion of their technical assistance must derive from experts in public health. It would not be inappropriate that such an expert be identified directly with the planning, development, and operation of each one of the projects.

On the subject of comprehensive health services, funds are recommended to maintain 67 neighborhood health centers and to fund 41 family health center projects. These projects, aimed at providing prepaid ambulatory health care in urban and rural medical scarcity areas, are located in 32 States and the District of Columbia and have a potential for reaching over 400,000 persons when fully operational.

The migrant health program will also be maintained at current levels providing ambulatory health care services to more than 338,000 persons.

As all of these projects mature and succeed in coping with immediate and pressing curative health problems, they must address themselves increasingly to preventive and health maintenance services. The interests of successful outcomes from the maternity cycle, from early childhood development, and from the supportive family life, require that these programs be planned and evaluated with participation of experts in maternal and child health.

Family planning: An apparent increase of funding derives from transfer of projects from OEO. In any event, the level of services in 1972, reaching 2.6 million women, will be maintained and expanded insofar as possible within stabilized sources of funding. Nearly all experts in family planning have derived all or a portion of their training in programs of maternal and child health.

Disease control: Major emphasis is centered on control of venereal disease. During 1973, approximately 10,000 State and local employees will be trained by CDC. This activity will continue in 1974, but on a reimbursable basis. No matter what the basis of payment, if there are 10,000 local and State employees to be trained each year on venereal

disease control, they will need to be trained with the participation of such experts as those in maternal and child health. Venereal disease, lead poisoning, sickle cell anemia will need to be controlled through educational means, much of it directed toward young children and certainly toward teenagers. Training programs in maternal and child health provide many experts in these matters.

The report that Dr. Hall will summarize is the report on traditional careers in public health. It does not cover the important fields of allied health sciences that have ordinarily been met outside schools of public health. It does not cover outreach workers, and new professionals, such as family planning aides and family health aides. These are subjects that deserve intensive study, as would be provided in your bill.

I had prepared, Mr. Chairman, some specific comments about the legislation under consideration today. I think I will not make those comments. It seems to me that there are far more fundamental policy issues at stake rather than specific minor revisions concerned with your bill.

Let me say only as a member of the governing council and governing board of the American Public Health Association, we give enthusiastic support to this legislation.

Mr. ROGERS. Thank you, Dr. Miller.

If you would like to submit written comments on various points, the subcommittee will be pleased to receive them.

Dr. MILLER. Thank you, Mr. Chairman.

Let me say the American Public Health Association represents a group of 25,000 experts in this country on all matters of public health, and I pledge the assistance and participation of the association in whatever kinds of studies and analyses may be helpful to the worthy objective you are seeking.

Mr. ROGERS. Thank you. That will be most helpful. I think the study on professional manpower and community health programs should be distributed as widely as possible to the Secretary of HEW, to the Assistant Secretary for Health, to the Office of Management and Budget, to the Domestic Council for the President, and to the White House.

Dr. MILLER. Thank you very much. We shall do that.

Mr. ROGERS. Perhaps it would be helpful to the AMA as well.

Dr. MILLER. We are eager to hear Dr. Hall's summary of the manpower study. Before doing so, I feel compelled to respond in an extemporaneous way to several emphases that came out of earlier testimony.

I have not had an opportunity to study it with the care it deserves, but I am disturbed by a number of assertions made in this testimony which certainly are not consistent with my own experience.

Page 4 of the testimony states, for example, that student assistance is available through alternate sources; that is, programs that are generally available to all students and administered by the Office of Education. All I can say is that is not true for students in public health. That money is either not available or it has had little appeal to students who are seeking careers in public health.

The statement goes on to say that schools of public health on the average received less than one-fifth of the institution's total expendi-

tures from these Federal sources during 1970 and 1971. Our school received about 80 percent of its total budget from Federal sources, and I think that is true of most well-established schools of public health that I know.

Mr. ROGERS. I think it is well to point out, if you would permit, that there is a rationale for such support, because there are only 18 schools to service all of the 50 States.

So, it is appropriate for there to be some help in effect from all of the other States to support where they are obtaining benefits.

Dr. MILLER. It is also important to point out that a substantial portion of the Federal money going to schools of public health is for research programs, but the faculty members that generate those research programs need basic support, and it is the national interest for the Federal Government to provide that in part.

On page 5 of the testimony, the statement is made that Federal funding has not been a crucial factor in the substantial growth in the allied health field. As a university administrator for a number of years, I would have to say that is not true in my experience.

The programs that my colleagues and I started in allied health sciences in many schools were started because Federal funds were available to support them.

The emphasis on the area health education centers as a mechanism to replace some of the work done by schools of public health, it seems to me, you have very successfully punctured, and I would add my support for the skepticism that this is an adequate replacement mechanism. As I understand such centers, they are mechanisms to assist medical schools to establish satellite centers in hospitals in order that the benefits of medical education and continuing education can be continued in such communities. That is an important but a limited benefit. It does not provide public health manpower.

Finally, the statement was made that though there may be shortages of public health manpower, we can look to the marketplace for correcting those shortages. I know of no evidence that that is true. There is some evidence that curative health services will respond to a supply and demand market situation. When a person is sick, he makes demands for services and there usually is a response to meet the demands. There is no spontaneous demand for preventive or public health services. Responsible government must anticipate needs.

Mr. ROGERS. How can you attract someone into public health service unless you give some assistance—at a starting salary of \$14,000 compared to \$40,000 or \$45,000 for the doctor who practices clinical medicine?

Dr. MILLER. There is a colleague of yours and mine from North Carolina who is fond of quoting traditions. I think public health is one of the oldest Federal traditions we have. I am told that when George Washington requested the Continental Congress to convene away from Philadelphia, it was because of his fear of the yellow fever epidemic in that city. The Federal Government has been acknowledging its role in preventive health services ever since.

Mr. ROGERS. Thank you very much.

Dr. MILLER. Thank you very much for the privilege of visiting with you.

I will now call on Dr. Hall for his testimony.

Mr. ROGERS. Thank you for a most excellent statement.

Before you begin, may I say I notice in your study you have determined that about 40 percent of the graduates of public health schools are foreign persons; is that correct, or has it been reduced?

#### STATEMENT OF DR. THOMAS L. HALL

Dr. HALL. I am not aware of what period you are referring to. The latest available data I have from 1971 suggests 81 percent of the graduates from the North American schools of public health are Americans, 4 percent are Canadians, and 15 percent are from other countries.

Mr. ROGERS. Almost 20 percent of those now being trained in our schools are foreigners. We would anticipate some of those would return so that the output of the school, the graduate, is not necessarily determinative of the number of people who would stay here to practice; is that not true?

Dr. MILLER. It is true but it is important to point out that a very large number of those foreign students are brought here in the national interests on national programs to give foreign aid.

Mr. ROGERS. To try to help give some aid through health programs.

Dr. HALL. The point is extremely valid, and I will comment on it a little later on since it tends to give an incorrect impression of the adequacy of the balance between supply and requirements.

Mr. ROGERS. You may proceed.

Dr. HALL. Thank you very much.

My name is Thomas L. Hall and I am a professor in the department of health administration of the University of North Carolina School of Public Health and deputy director of the Carolina Population Center.

I am here on my own behalf and am glad to have the chance to meet with the subcommittee today and to share with it some of our findings with respect to the supply of and the requirements for public health manpower.

I would like to complement Dr. Miller's presentation by providing you with some of the highlights of the quantitative part of this report and also to comment and perhaps clarify some of the statements made by the previous witnesses.

My remarks will seek to do three things:

(1) Place the requirements for public health manpower within the context of total health sector manpower requirements;

(2) Call attention to several areas where our studies suggest the projected manpower deficit within the various public health specialties is particularly acute; and

(3) Cite some of the problems which we have encountered in the execution of our study and which we hope will receive the explicit attention of the Congress and of the administration so that our capacity to plan in this important area will be enhanced in the future.

Before starting my formal presentation, I would like to stress the preliminary and unofficial nature of the figures I will be sharing with you. Our report has benefited from the input of many persons and institutions, and we have made extensive use of Government documents. However, we do not represent the official views of agencies and professional societies concerned with public health, nor have they yet had

a chance to review in detail our consolidated report and make known their observations. We are sure that in due course our data will be refined once a dialog has been fully opened on this topic, and we hope the refinements will be incorporated. We are confident that our major conclusions will remain essentially unchanged.

With these caveats I would like to review the main findings of our study.

The first point is that we are talking about is a very small percentage of the total health manpower requirements of the country.

In 1970 Government estimates placed the health sector work force between 4.2 and almost 4.4 million persons. If the lower estimate is projected at the very modest annual growth rate of only 1.8 percent, only a bit over the rate of population growth, the health work force would reach 5 million by 1980.

The combined requirements for the 11 professions studied add up to over 52,000, or slightly more than 1 percent of the total.

Perhaps another few thousand persons could be added to take account of the 10 or so smaller public and community health specialties that we did not study, but the essential relationship would remain almost the same.

This 1 percent of the health labor force represents the core leadership group for three major kinds of activities:

(1) Designing, planning, developing, managing and evaluating the health services delivery system. (Examples of appropriate specialties include: health administration, hospital administration, health planning; mental health; nursing home administration.)

(2) Taking responsibility for directing and implementing that portion of the health system which is concerned with the prevention of disease in individuals, families and communities. (Examples of appropriate specialties include: maternal and child health; family planning; health education; nutrition; public health nursing; environmental health; accident control.)

(3) Carrying out research studies on those disease conditions that are caused or aggravated by environmental factors and by our patterns of living, as well the correlation between health services delivery and improved health. (Examples of appropriate specialties include: epidemiology; health statistics behavioral sciences; economics; environmental health.)

These are the primary concerns of public and community health personnel, and though their contribution in general is not as dramatic as that of the doctor or nurse providing direct patient care, their cumulative impact on improving health conditions has been massive, especially considering the modest investments that have been made in community health programs as compared with medical care.

Our study bore out the observations you have already heard about from other sources regarding the characteristics and income prospects of public health personnel. I shall therefore not go over this point in detail. I will only note that according to our figures, over 90 percent of all personnel are salaried employees, of government, voluntary agencies, or of educational institutions.

Mr. ROGERS. Ninety percent of public health personnel?

Dr. HALL. Yes; there are probably only several percent that are actually in consulting firms or private profitmaking entities.

I might note one additional bit of information regarding the difficulties of public health students in using the type of loan mechanism proposed by the administration. At the present time approximately 60 percent of all public health personnel are 30 years old or older. At this age naturally these students have family responsibilities. They have often had previous jobs and have developed a pattern of living and a family budget that make it particularly difficult for them to return to a training institution. Although the average student age is gradually coming down we still have a student enrollment with an age distribution which makes it difficult for them to use the rather meager loan provisions offered by the administration.

I would next like to turn to table III-5 in the four-page handout I have distributed to you.

First a few words on this document. Page 1 is the table of contents of the full report that we will provide within several weeks.

Pages 2 and 3 provide an overview summary of the present situations regarding manpower supply and requirements and page 4, table III, provides supply estimates for 1970, 1975 and 1980 along with the projected requirements in 1975 and 1980. You will note that the left-hand column with numbers in it provides estimates of the numbers of public health professionals within each of the various categories who were employed in 1970. The table is limited to persons presumed to have a master's degree or higher. The total for 1970 is just under 20,000.

Just a quick scan down the next two columns, for 1975, suggests that for most manpower categories there is fair agreement in the supply and requirements projections, certainly acceptable differences in the light of the limitations of the data with which we have had to work.

By 1980, however, the differences become more pronounced in the fields of environmental health, health education, health statistics, nutrition, and especially in health services administration.

Although the mental health manpower projections have not yet been completed, we anticipate that the gap will be very pronounced here, reflecting in part the lack of adequate training capacity in the various training institutions and in part a lack of interest on the part of many psychiatrists and to a lesser degree other mental health workers, in obtaining community mental health training.

Several observations about the largest category, and the one with the largest deficit, health services administration. This category includes four subspecialties, hospital administration, nursing home administration, health planning, and health services administration of the kind that would be expected in a health department, health maintenance organization, voluntary or governmental health agency, or insurance program.

The standards we used to project the requirements of just over 25,000 master's level administrators by 1980 would, depending on the subspecialty under consideration, satisfy only a fraction of what might be termed the optimal needs for such personnel, given a health delivery system the size of the one projected for 1980. For example, we estimated that less than two-thirds of the necessary number of health planners would be trained, that only one-eighth of the population would be served by health maintenance organizations, and only

one-third of the nursing homes would have a fully qualified administrator. Indeed, the proposed target would provide only one senior administrator or planner per 160 health personnel, excluding from the calculation all occupational categories such as physicians, dental personnel, optometry personnel, pharmacy personnel, and environmental personnel who normally work outside the regular health administrative hierarchy. Although we wanted to keep our proposed targets within the realm of fiscal realities during the remainder of this decade, we believe that ultimately a substantially better ratio can be justified in terms of the positive effects well-trained administrators and planners can have in rationalizing our use of costly health resources.

I would now like to call your attention to the first two important footnotes at the bottom of table III.

The significance of the first note can be highlighted as follows:

The 1980 requirements are estimated at about 52,000, while the projected supply is under 40,000, assuming continuation of the 1970 enrollments, thus leaving a substantial manpower gap. I might not here that this shortfall of 12,000 is more than double the 5,000 shortfall referred to earlier by Mr. Preyer. The lower estimate was taken from an earlier draft of this public health manpower report, one which took into account less specialty categories than is now the case.

The current estimated gap of 12,000 persons will be substantially greater, however, about 4,000 persons greater, if the budget cuts originally proposed last January by the administration for fiscal year 1974 are indeed implemented.

The second footnote suggests that the projected supply may indeed be unrealistically high. We made our estimates based on U.S. requirements alone with the minor exception of public health nutritionists, where an allowance was included to cover the probable number of foreign students. The Agency for International Development, the World Health Organization, and other international agencies use the U.S. schools of public health as a major training resource for the developing world. In some disciplines the proportion of foreign students on fellowships from international agencies or from their own governments may exceed 20 percent. The net effect of this factor is to overstate the actual supply of personnel that will be available to the United States and to understate the total requirements, domestic and foreign combined. Thus you will appreciate that if we are to continue making this vital training contribution to the developing world, our own production of public health professionals is none too generous.

I would like to conclude with a few remarks on the "state of the art" of public and community health manpower planning. I have been working almost full time in health manpower planning since 1963, primarily at the national level in developing countries. This is my first major involvement in public health manpower planning and I must confess to my dismay at finding the sad state of affairs that greeted us as we began work on this project. Despite excellent cooperation from various agencies and individuals, the data base available for planning is very incomplete, often inaccurate, and in many cases, not very relevant to planning. Indeed, I was reminded of the problems we encountered in developing countries. Important improvements in the data base are now underway and several somewhat limited studies have been commissioned by government and private agencies which should help clarify many of the issues that we have been struggling



with these past months. However, much more needs to be done, especially as regards the creation of a mechanism so that as improved data become available, they are used in a timely fashion to shape manpower policy. Our report includes a series of proposals along this line which if adopted, could help resolve these difficulties, and I hope that the Congress will continue to press the administration for more and better information on which to base its decisions regarding legislation. In this regard the sudden specter that many health educational schools have had to face of possible abrupt termination or reduction of the Federal support for their activities has had at least one salutary effect, that of obliging them and their professional peer groups to examine closely the merits of what they are doing and to document their future needs and objectives.

Thank you very much for inviting me to participate in these hearings. As soon as the full report is complete, we will be glad to make it available to the subcommittee, and I will, of course, be glad to answer any questions within my competence, either now or in writing later on.

I could now make reference to several of the points brought out by the administration's witnesses earlier this morning or defer.

Mr. ROGERS. As I understand, as soon as your study has been fully completed and reviewed by various groups, you would present that to us as well and make it available to the departmental people, the White House, the Office of Management and Budget, and the AMA.

Dr. HALL. That is right.

Dr. MILLER. That will not be a long time, about a week or two.

Dr. HALL. Rather than holding up the circulation of this report until we have had a chance to obtain additional reviews and comment from a selected panel of experts, we are anxious to distribute it to a wider audience and let a dialog develop around its findings. We view our ad hoc, voluntary effort as one oriented toward promoting discussion and additional study rather than as providing a definitive answer to the questions under consideration.

Mr. ROGERS. These figures are concerned with professionals who have had master's level training or higher, are they not?

Dr. HALL. Yes.

Mr. ROGERS. So in this specific category you are telling us the shortage is growing there very dramatically?

Dr. HALL. Yes.

Mr. ROGERS. I would be pleased to have your comments on the testimony that you heard this morning from HEW. If you have any specific comments please make it as concise as possible.

Dr. HALL. I do want to note for the record that our projections on the supply of health services administrators do include the production of nonschools of public health.

Mr. ROGERS. Your figures include that?

Dr. HALL. Yes.

Mr. ROGERS. So what he is telling us has not much foundation because you have already included those in yours.

Dr. HALL. We have included the output of over a hundred programs and only 15 or so are from schools of public health.

There was discussion about there being a "manageable deficit." My comment on this is it is manageable only if the support is continued at the present level. Then it might be manageable. However, if the



administration went through with their reduction, then I think we have well passed the boundary of manageability.

Mr. ROGERS. As far as the schools of public health, do you think we would see closings of schools of public health?

Dr. HALL. Very definitely, our information suggests at least five schools were considering possible closure. I might mention the possible effects of the proposed budget cuts on my own Department of Health Administration at the University of North Carolina. If these cuts had been implemented we would have been obliged to: (1) terminate 13 of our 14 secretarial, research assistant, and other administrative personnel; (2) lose the services of approximately one-third of our 25 faculty; (3) eliminate all travel not covered by special grants and contracts, eliminate our duplication service, and virtually eliminate all toll phone calls; and (4) eliminate most forms of student support, including that related to field training. The elimination of student field training would substantially reduce the quality of the overall educational experience we can offer and a reduction in the level of total student support would make it much more difficult to attract well-qualified students to the school. Moreover, the image of a whole department being served by one lone secretary is almost as ludicrous as it is tragic.

Dr. MILLER. While the statement is reported accurately that no public school had to close, there are many important programs within those schools that have had to be terminated. Our own school terminated mental health training because of a lack of funding.

Mr. ROGERS. Have any schools had to release faculty members? Does that possibility exist?

Dr. MILLER. Our school has been obligated to terminate faculty members. I know of many other schools where this has also been true. The statement was made this morning; after all, these are only young people, the tenured professors have not been terminated.

In a way, that is true, but in a way, also, the tenured people are facing legal obligations that they cannot be terminated.

Mr. ROGERS. Furthermore, I presume if you cut off the young blood coming in, this is disastrous to the program in a very short time.

Dr. MILLER. Indeed.

Dr. HALL. We would be completely dependent on our ability to get project funds, which raises the question of the ethics of doing a substantial amount of teaching when our support really comes from research and service contracts.

Mr. ROGERS. Our health manpower bill is designed to get around that. Where we would support medical education and public health education directly, this bill would work so you don't have to go through a fiction of research that they are trying to make you go back to again.

Dr. HALL. I'd like to refer to the comments made earlier by the administration's witnesses about the possible use of Area Health Education Center (AHEC) funds for student training. Just yesterday in my departmental faculty meeting we were notified that student field support through the AHEC mechanism will be virtually eliminated in the coming academic year due to insufficient funds. In the past year we have been able to reimburse mileage costs for less than 5 of our 83 enrolled students majoring in health administration studies in con-

nection with the eastern North Carolina AHEC project. We have not been able to provide anything resembling field traineeship support, nor cover the salary, travel and subsistence costs of field faculty preceptors. Next year, this extremely limited support will be reduced even more.

I agree with the administration's witnesses when they referred to the imprecise nature of public health manpower projections. However, it should be noted that our work in this area as well as that of others has been seriously handicapped by the lack of comprehensive data on this component of the health manpower picture, a deficiency the administration has not yet resolved. Moreover, when you are considering a manpower category which is as dependent on governmental policies as is public health, it is particularly important that those concerned with manpower planning be fully apprised of Government plans and strategies regarding the future development of health services. We need to know what Government plans to do in the way of health, and unless Government can tell us that, we are seriously weakened in our ability to make accurate projections.

Mr. ROGERS. It would help the Congress if the Department of HEW could tell us what they plan as well. As you heard this morning, they have no plan. They just say don't pass any law on this subject matter—we are thinking about it.

Dr. HALL. The administration's witnesses made reference to the SOAR project (supply, output, and requirements) which, when completed, will greatly improve our data base and planning perspective regarding health manpower. I have been following with interest developments with respect to the SOAR project but most unfortunately understand that at least to date, public health manpower has not been included among the various manpower categories that are under consideration.

One small comment on the number of physicians and professional personnel. While it is true that the absolute number of physicians studying public health has increased somewhat during the 1960's, the percentage of public health graduates who are physicians has declined from 24 percent to 17 percent and this downward trend is continuing. Moreover, a very substantial proportion of the physician graduates are foreigners. This situation regarding physicians is in part a reflection of the difficulty in getting competitive salaries and adequate traineeship support for American physicians during the time of training.

There were comments earlier this morning on the lack of Federal support for training nurse clinicians. I would like to cite our own experience in region IV which covers the eight States in the Southeast including your own State of Florida.

I helped to prepare a plan for making family planning services available throughout region IV during the period fiscal year 1973-75. My specific responsibilities were in relation to the manpower component of the plan. At that time, we estimated that there was a need for at least 550 family planning nurse clinicians by fiscal 1975 and at the time we did the study there was a supply of only 20 or 30. In looking at the prospective output, we estimated it to be only 30 to 40 nurse clinicians per year, grossly inadequate in relation to the needs. The effect of this shortage is either to limit the availability of family planning services or to have virtually all services provided by physicians—

an alternative which places greater and medically unnecessary demands on already scarce physician manpower.

I think these are the only comments I have to make at this time.

Mr. Rogers. Thank you very much, Dr. Hall.

Dr. Miller and Dr. Hall, we are very grateful to you for being here.

This is most helpful to the committee. We will be anxious to receive the final report and I think your projections certainly would be helpful to HEW who simply don't have any, so I hope you can make them available as rapidly as possible.

Thank you for being here.

The committee stands adjourned until 10 o'clock tomorrow morning.

[Whereupon, at 1:30 p.m., the committee was adjourned to reconvene at 10 a.m., Wednesday, July 25, 1973.]



## **PUBLIC AND ALLIED HEALTH PERSONNEL**

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**WEDNESDAY, JULY 25, 1973**

**HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON PUBLIC HEALTH AND ENVIRONMENT,  
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,  
*Washington, D.C.***

The subcommittee met at 10 a.m., pursuant to notice, in room 2123, Rayburn House Office Building, Hon. Paul G. Rogers, chairman, presiding.

Mr. ROGERS. The subcommittee will come to order. We are continuing hearings on H.R. 9341, the Public and Allied Health Personnel Act of 1973.

Our first witness this morning is from the Association of Schools of Allied Health Professions, Mr. William M. Samuels, executive director of the association. Dean Joseph Hamburg, College of Allied Health Professions at the University of Kentucky Medical Center; Mrs. Elizabeth Lundgren, who is the director of the Division of Health Studies at Miami-Dade Community College in Miami, Fla.; and Dean Aaron L. Andrews, School of Allied Health at Ferris State College, Big Rapids, Mich., are our other witnesses.

The committee welcomes you, and we appreciate your presence here. We will be delighted to have your testimony. If there is anyone else you desire to have with you at the table, we would be delighted to have them join you.

You might identify yourselves for the reporter.

### **STATEMENTS OF A PANEL REPRESENTING THE ASSOCIATION OF SCHOOLS OF ALLIED HEALTH PROFESSIONS:**

**WILLIAM M. SAMUELS, EXECUTIVE DIRECTOR, ASSOCIATION OF SCHOOLS OF ALLIED HEALTH PROFESSIONS;**

**DR. JOSEPH HAMBURG, DEAN, COLLEGE OF ALLIED HEALTH PROFESSIONS, UNIVERSITY OF KENTUCKY, LEXINGTON, KY.;**

**ELIZABETH LUNDGREN, DIRECTOR, DIVISION OF HEALTH STUDIES, MIAMI-DADE COMMUNITY COLLEGE, MIAMI, FLA.;**  
**AND**

**AARON L. ANDREWS, DEAN, SCHOOL OF ALLIED HEALTH, FERRIS STATE COLLEGE, BIG RAPIDS, MICH.**

Mr. SAMUELS. Mr. Chairman and gentlemen, I wish to express to each of you on behalf of the officers, directors, and members of the Association of Schools of Allied Health Professions our appreciation

for allowing us to appear before you today to present testimony on H.R. 9341 as it relates to the revision of programs of assistance under title VII of the Public Health Service Act for the training of allied health personnel. I intend only to make a brief introduction as to the association itself and provide you with the backgrounds of the association's three presenters.

The Association of Schools of Allied Health Professions fulfills a role of representing the Nation's allied health educators and practitioners and their concerns with the needs of the Nation as they relate to the total field of allied health education.

The association has representation in its membership at all levels of education—from certificate programs through the associate degrees and baccalaureate degrees as well as the higher degree programs. Additionally, membership includes clinical facilities with allied health educational programs and the major health organizations with serious interests in allied health education.

The concerns to be expressed here today concerning H.R. 9341 are, by and large, the concerns of the full membership of the Association of Schools of Allied Health Professions.

These concerns will be voiced in the next few minutes by Joseph Hamburg, a physician who is the dean of the College of Allied Health Professions at the University of Kentucky Medical Center, in Lexington, Ky., and who is a former president of the association; Mrs. Elizabeth Lundgren, who is the director of the Division of Health Studies at Miami-Dade Community College in Miami, Fla., and who is a member of the association's board of directors; and, our final presenter will be Aaron L. Andrews, dean of the School of Allied Health at Ferris State College, Big Rapids, Mich. Dean Andrews is the immediate past president of the association and is chairman-elect of the Federation of Associations of Schools of Health Professions.

All three individuals are pioneers in allied health and are, perhaps, among the most knowledgeable people in this Nation concerning the affairs as well as the needs of allied health educators and practitioners. Dean Andrews, for example, established what is considered the first school of Allied Health Professions when he was at the Indiana University Medical Center complex in Indianapolis. He also started one of the first schools in the State of Pennsylvania when he was at Temple University.

After these three have made their presentation we would be most pleased to answer any questions you gentlemen may have.

Thank you. And now may I present Dr. Hamburg.

Mr. ROGERS. Thank you, Mr. Samuels.

Mr. CARTER. The gentleman comes from my State and I am quite happy to welcome him here. As he well knows, I strongly support both institutions in our State and throughout our country as does our distinguished chairman.

#### STATEMENT OF DR. JOSEPH HAMBURG

Dr. HAMBURG. That is well known.

Thank you, Mr. Chairman.

We are pleased to be here today and grateful for the opportunity to testify on the allied health section of H.R. 9341. My colleagues

and I am most appreciative of the efforts of the members and staff of this subcommittee who labor so diligently on behalf of those of us who seek to provide quality education for the allied health professionals. We are firm in the conviction that you have afforded us the opportunity to comment upon this proposed legislation because you are committed to evolving the best and most effective legislation possible. We hope you will accept our comments as constructive suggestions toward this same end.

With your indulgence, I would like to preface my testimony with a short historical backdrop.

Although the allied health professions and occupations have been with us for sometime, it wasn't until late in the 1950's that an idea emerged which we like to term the allied health concept. This concept is based upon several assumptions:

1. That the team approach to health care delivery is a viable solution to the health manpower problems which we face.

2. That the allied health professions will play an increasingly important role on this team. Furthermore, that we would be able to validate the soundness of this approach if in some fashion we could demonstrate that the allied health professions are truly a group of collaborative, cohesive professionals capable of subrogating their own personal or vested interests for the good of the team; and consequently, the patient. And finally that one of the reasons our health professionals have difficulty in working well with each other as a team is because they have never learned together as a team.

If these premises were to be tested, then what was needed was an academic environment which would foster and support activities which sought to bring these allied health professions students together. This environment would afford them an opportunity not only to learn together, but to become more aware and respectful of the capabilities, skills, and competencies of each other.

These assumptions formed the rationale for the establishment of schools and colleges of allied health in many of our junior and senior academic institutions; centers for multiple programs in allied health. This movement, although still early in its development, has gained great momentum and many supporters. It led, in fact, to the establishment of the Association of Schools of Allied Health Professions.

Even those who might not be as thoroughly convinced as we are that the team concept is a proper solution to the health manpower shortages find it difficult to refute the economies of dollars, effort, time, and space which can be obtained through the establishment of such allied health education centers. The potentials for interdisciplinary teaching and learning are obvious. The opportunities for sharing expensive facilities and scarce faculty are nowhere more evident than in these schools and colleges of allied health.

They offer in today's academic marketplace a rare opportunity to try something new in an academic sense and affect simultaneously the aforementioned economy. We feel certain, too, that such a combination of allied health programs must also have a positive effect on the quality of our product.

In the few short years of their existence, these centers for allied health education, these schools and colleges, have become the focal points for a tremendous amount of productive research in the educa-

tional process. Because of their size and multiplicity of programs, they are able to attract a much more diverse and sophisticated faculty. Such a variety of skilled professionals, in turn, enhances the capability of such centers to conceptualize and implement many innovative approaches to allied health education.

These schools have worked diligently to improve, modify, and evaluate new and existing curricula. They have engaged in important studies which have improved the effectiveness of faculty; the selection process of students; the continuing education of practicing allied health professionals, and a host of related activities. They have shared freely with all of us the results of their findings and the products of their efforts. Such performances make each of them truly a national resource for allied health education; important above and beyond their local and State contributions.

Such centers for allied health education should logically have engendered a great outpouring of Federal interest and support. Unfortunately for whatever reasons, such has not been the case and is still not the case in the proposed legislation.

If directed legislation is not developed which encourages allied health educational programs to be so organized and clustered, we will have a continuation of the present diffusion of programs and a dilution of our limited resources. Let me show you an example of how allied health education compares with some of our other health professions. These data are for the year 1972.

Health program	Number of accredited programs	Number of graduates	Average number of graduates per program
Medicine.....	113	9,617	85
Dentistry.....	56	3,961	71
Pharmacy.....	73	4,514	62
Respiratory therapy.....	125	749	6
Medical technology.....	749	5,367	7
Radiologic technology.....	1,113	6,661	6

<sup>1</sup> B.S. only.

Gentlemen, it is obvious that the program-graduate ratios in some of these allied health disciplines do not compare favorably to those of medicine, dentistry, and pharmacy. Even standing by themselves, they reflect a questionable efficiency.

One can make a case for the necessity of having more allied health programs than we have programs in medicine, dentistry, and pharmacy. One can make a strong case for the continuation of small individual allied health programs in areas of severe unrelieved manpower shortages such as exist in some of our rural communities. But even with these exceptions aside, one cannot in honest conscience assume that such low levels of productivity as evidenced in these ratios should be encouraged. I would like you to tell me what there is in the present legislation which seeks to correct this situation?

I do not suggest that merely by establishing centers for allied health education we will solve all of the problems of allied health manpower. I do not suggest that all allied health education must be based in 4-year or even 2-year colleges; there are many very fine programs located in hospitals and technical institutes.



I do believe, however, that these latter programs must be articulated directly with academic allied health education centers for a number of obvious reasons, not the least of which are the kinds of support, direction, and coordination such centers can provide. These centers, in turn, would be responsible and accountable for the quality and currency of curriculums and the competence of its graduates. Legislation must be forthcoming which encourages such integration.

One last word. In the past, Federal support for allied health education has been not only parsimonious, but capricious. No sooner do allied health programs conform to the requirements for eligibility for Federal funding in one fashion when new legislation requires them to shift and rearrange their priorities in an entirely different direction. These mercurial vacillations do little if anything to encourage academic stability. Neither do they reflect favorably upon those who would propose them. I make a special plea that whatever allied health legislation is finally decided upon, that it be continued for a period long enough to allow the Congress to make sound judgments upon its effectiveness.

H.R. 9341 has several fine features. Providing special grants to encourage equivalent testing, the development of career ladders, the exploration and development of new kinds of allied health personnel are all important areas of concern.

However, in our view the bill fails to deal with areas which are equally important.

My colleagues' testimony will explore some of the other areas of allied health education which we feel merit your attention.

Thank you.

Mr. ROGERS. Thank you very much.

I am very delighted that Mrs. Lundgren is here from the State of Florida. We know of her fine work and I am sure her testimony will be most helpful to the committee.

#### STATEMENT OF ELIZABETH LUNDGREN

Mrs. LUNDGREN. Mr. Chairman and gentlemen of the committee, since 1966 my work responsibility has been directly related to allied health education in 2-year colleges and technical centers—first as a State consultant and now as administrator of the largest allied health education program in the Nation. Consequently, the plea I make to you today stems from experience and direct involvement through most of the span of history of allied health education development in the 2-year college.

The development of allied health programs in the 2-year college parallels in time the development of Federal funding. Consequently an overall review of the effects of Federal funding on these programs is more an indicator of the irrational expenditure of funds by the Federal Government than in any other category of institution.

If an illustration of a symbolic policymaking by Government in current experience can be found, it is funding for allied health education in 2-year colleges: first by token inclusion and now by the trend of complete withdrawal which includes the proposed legislation under consideration here today. In the programs for which I am accountable

the decision not to request funds or even refuse funding offered to us was often based on the very fact that funding requirements and strong programing were mutually exclusive. Some trends of the effects of present and past funding routines which can be identified are:

1. Patterns of funding are punishingly restrictive in mechanics while encouraging a lack of appropriate planning within the colleges and the community. This leaves the quality of many programs in great doubt.

2. Funds are often awarded in terms of fads rather than the realities of employment or need in the clinical practice.

3. The requirements were so established in most "pilot" or emerging programs that the programs could not be duplicated and the funds for continuation were not available within the established financial structure.

4. Funding for 2-year colleges appears to be mere additions to or extension of models used for medical schools on one hand or industrial-technical education on the other.

5. Funds are awarded without consideration of the organizational or staffing structure of the college, thereby allowing programs to be funded without regard to quality or eventual effect on students and care of patients.

6. Funding for programs to train "new workers" resulted largely in programs calling an established category by another name or the production of individuals without acceptance for their skills in employment.

7. The credibility of already established programs was minimized often in order to comply with some regulations.

8. Overfunding in some areas while completely omitting others through restrictive regulations for compliance was repeated numerous times.

9. Funds were often available only in the event colleges could adopt the historic clinical model rather than encouraging an integrated model for a functional interrelationship of clinical and oncampus education.

10. Too often there was little relation between awarding of funds and administration of funds. An example is the practice of awarding funds to universities for development of programs best suited to the 2-year college; or, ill-planned awarding of funds to 2-year institutions for programs which should be in higher level institutions.

I ask your help for rational funding. Use those of us working in the 2-year colleges as consultants to revise the legislation under consideration today to include the 2-year colleges, to provide guidelines for quality control, to encourage programing that reflects the realities of employment, and to functionally support those colleges and technical centers in which valid programing is possible.

Thank you.

Mr. ROGERS. Thank you very much, Mrs. Lundgren.

#### STATEMENT OF AARON L. ANDREWS

Mr. ANDREWS. Mr. Chairman and members of the committee, it is my pleasure to have the opportunity to appear before you today and to present the views of the Association of Schools of Allied Health Pro-

fessions for your consideration in developing sound, forward-looking legislation for the field of allied health. In so doing, it is recognized that the intent of legislation relates primarily to the broad goal of improving the availability, accessibility, acceptability, and financing the comprehensive health services needs of society. There can be no doubt that allied health personnel represent a national resource in assisting to bring about this change.

A first step toward this change is embodied in this testimony in the form of guidelines which will assist markedly in a more cohesive and planned development of allied health education centers. And, as such, supports the thrust of H.R. 9341.

We must recognize that the rapid and proliferating growth of allied health programs which has occurred since 1967 has been in part due to deficiencies in earlier legislation. Our association is concerned with the health manpower continuum, recognizing all levels of postsecondary education in the all allied health fields. Once this first step—which we are recommending to you today—is accomplished, it is incumbent upon higher education to address itself to the roles of each of its segments and the role that each segment must play in developing a system and its interrelationship in allied health education.

A determination of the priority roles of each group of institutions and their desirable interrelationships will do much to assist in the development of allied health manpower. It is going to be of increasing importance that this type of dialogue and working relationships be developed for not only the point of clarity, but also in working together through consortium type arrangements and the injection of such arrangements into area health education centers in a meaningful way.

These guidelines are proposed by the Association of Schools of Allied Health Professions as five primary provisions to improve the quality of training in the field of allied health at a cost of \$63,500,000 for the fiscal year 1975.

#### 1. INSTITUTIONAL SUPPORT GRANT—\$30 MILLION

These funds would be available to “centers of allied health” that meet the following requirements:

A. A center must have a distinct administrative structure with a full-time administrative officer, director, or dean, and have responsibility over a distinct budget.

B. The chief administrative officer, director, or dean must have full responsibility for the training of all allied health students including their clinical education.

C. A “center of allied health” must have a minimum of three accredited allied health programs. The parent institution must be recognized by its regional accrediting body as well as accreditation for the specialty area through that organization recognized by the U.S. Commissioner of Education. This is not meant to be exclusory. There are areas where accreditation does not exist. They will be able to participate through recognition of the parent body.

D. A “center” must graduate a minimum of 50 students each year.

A “center of allied health” meeting these requirements would be granted \$50,000 annually to be used for the direct support of the program. This does not include the support of nonallied health courses

contained within an allied health program such as English, history, et cetera. Each "center of allied health" having more than the level of three programs would have its support increased by \$15,000 for each additional program, and for each graduate exceeding the level of 50, support would be increased by \$1,000 per additional graduate. Provision should be made within this section to permit funding within a specific geographical area, where there exists "unusual" need, a single program whose contribution is imperative to the health care needs of the people of that region.

**Rationale:** By establishing a minimum of three programs and 50 graduates, this would assure a commitment on the part of the institution for quality education as well as providing the institution a known baseline from which it can maintain quality programs.

## II. SPECIAL SUPPORT GRANTS—\$5 MILLION

This would be used as startup money for institutions not yet eligible under section I. but who are working toward that goal. The amount awarded to any institution would be based on need as documented in a grant proposal and would show that the minimum requirements under section I would be reached in no more than 3 years.

**Rationale:** Institutions located in a geographical area where there exists need for allied health personnel and who possess basic resources and a desire to develop a "center of allied health" find the initial cost of forming such a unit prohibitive without outside assistance.

## III. SPECIAL PROJECT GRANTS—\$20 MILLION

This money would be used for innovative projects such as the development of curricula, expanded duties and roles of allied health personnel, training and development of new kinds of professionals, development of proficiency examinations, career ladders, et cetera. Awards of grants under this section would be made only to those centers or organizations which document the need for such projects and their ability to carry out such projects.

**Rationale:** The growth of the allied health professions is recent within higher education. Also many of the roles played by the allied health personnel need additional study and clarity. Grants are imperative to allow such projects to be undertaken.

The association supports the language contained in section 795.

## IV. STUDENT SUPPORT—\$7.5 MILLION

Direct support for the allied health student in the form of scholarships and/or loans should be made available. This would include traineeships at advanced levels to improve and to develop needed skills as determined by the Division of Allied Health Manpower and the Division of Manpower Intelligence.

**Rationale:** The majority of students entering the allied health field come from lower to middle-income families. The curriculum structure pattern in the allied health fields precludes a student from maintaining a successful academic achievement if required to devote additional

time for outside work as a means to subsist him in his educational pursuits. Work-study programs similarly are not feasible for the allied health student.

The association supports the language contained in section 796 and 797, but does further recommend a broadened eligibility in section 796.

#### V. STUDY OF ALLIED HEALTH PROGRAMS—\$1 MILLION

These funds should come under the Division of Allied Health to develop directly or indirectly data required for current and projected manpower requirements including cost studies on the education of allied health personnel.

**Rationale:** There is an overwhelming need to develop sound data regarding the allied health professions. Data which is available lacks completeness, currency and reliability. The orderly acquisition of data for specific disciplines or areas on which to base judgments for manpower requirements recognizing the potential changes in manpower needs as different utilization patterns develop for the delivery of care, which in many cases will require expanded duties and increased responsibilities for allied health personnel, are not known. This is a national need which hampers sound planning.

The association supports the language in section 798.

I have attempted to cite those necessary ingredients which should be contained in allied health legislation and very briefly, the rationale for their inclusion. In closing, let me express to the chairman and members of the subcommittee our real appreciation for your continued interest and your sensitivities to the needs of the allied health field. We would welcome the opportunity to be of further service to this subcommittee should it desire advice and consultation that we might supply.

On behalf of the Association of Schools of Allied Health Professions, it has been our privilege to have presented this testimony today, and we stand available for questions.

Mr. ROGERS. Thank you very much, Dean Andrews. We are appreciative of your testimony. I think now we may have a few questions.

Mr. NELSEN?

Mr. NELSEN. I have no questions at this time, Mr. Chairman.

Mr. ROGERS. Dr. Roy?

Mr. ROY. Thank you, Mr. Chairman.

I would like to thank the panel for their presentation.

Which is the greater force at work at the moment, the fragmentation of allied health training or the bringing together of allied health training?

Mr. ANDREWS. I think the fragmentation has occurred. I think we have to bring it together.

Dr. HAMBURG. I support that.

Mr. ROY. And the fragmentation has occurred because of the previous Federal legislation?

Mr. ANDREWS. I would not say totally but I would say it has certainly given it a major thrust. Under the initial act in 1966 containing the basic improvements grants, some of the qualifying factors were not in the regulations and it allowed many types of institutions without a serious commitment to so bring about further fragmentation.

Mrs. LUNDGREN. Only in part in that the processes encouraged fragmentation that was already there rather than encouraging articulation in program between 2-year institutions and universities.

Mr. ROY. Was it the legislation per se or the administration of the legislation or both that brought this about?

Mrs. LUNDGREN. It seemed to be a natural result of the way the process was set up.

Mr. ROY. Of course, we have had a simultaneous growth of junior colleges during that time.

It appeared to me from a very distant and superficial observation that every junior college in the country is reaching out into the area of allied health. I guess this was partly because of the availability of moneys.

Mrs. LUNDGREN. No, many junior colleges have not received funding from the allied health funds. As a matter of fact, in my own institution, we received \$111,000 over our 7-year history in 10 programs.

By simple arithmetic, you can see that is very minimal support.

Also, it appears to some administrators that allied health is a nice, easy area, and so it is sometimes unwisely assumed in junior colleges.

Mr. ROY. I hear repeatedly, of course, that we should train health professionals together if we are going to have a team approach to the delivery of health care.

Yet I look and see that we have 113 schools of radiological technology and 749 schools of medical technology and I wonder whether it is desirable or practical to reduce those numbers in order that they coincide perhaps a little better with the numbers of medical schools or is the plan to have many of these schools, three, four, five associated with one medical school or do we even wish to have them associated.

Dr. HAMBURG. We don't believe having 1,113 programs is an effective way to deliver radiologic technology graduates. We don't suggest their number should approach the small numbers of colleges of medicine, dentistry, and pharmacy for the reasons we have mentioned.

However, we must develop some kind of coordination among the programs, continue a few and discontinue others. Funding that fails to encourage this amalgamation will continue this kind of diffusion.

We feel this is not the best use of people, facilities, or funds.

Mr. ROY. Let me turn to another line of questioning.

How many States license respiratory therapists and how many license medical technologists and how many license radiologic technologists?

Can you give me some insight in this regard?

Dr. HAMBURG. The proper definition of certification is really the credentialing of the health professional. If it is done at all it is done by their respective health professions organizations.

The statutes are usually aimed at licensure rather than certification. I am unfamiliar with States that have certification.

Mr. SAMUELS. Dr. Roy, the latest figures I have seen shows that respiratory therapy has licensure in two States, California and Arkansas. Medical technology has licensure in 11 States and radiologic technology has licensure in four States plus the Commonwealth of Puerto Rico.

Mr. ROY. Is it desirable that these individuals be licensed?

Dr. HAMBURG. In my view and I would like the rest of the panel to speak to this point, I believe it ought to be discouraged.

I think licensure of these separate categories leads only to divisiveness, to independent kinds of status which under our present circumstances does not meet the needs of our patients and our country. It would be a divisive force rather than a cohesive force.

Mr. ROX. Should there be limitations placed on hospitals, pathologists, and radiologists, upon using noncredifed personnel?

Mr. ANDREWS. I would comment on it, Dr. Roy.

I think prior to it I would also offer that to my knowledge there are only two allied health professions actually licensed per se in States, namely, physical therapy and dental hygiene.

I also support Dr. Hamburg's view that I think national certification as we look at mobility of individuals in the health care system offers far more than State licensure.

Now, your question, as I commented on these, would you please?

Mr. ROX. Should people who are not certified be permitted to indeed do those things which certified technologists are doing?

Mr. ANDREWS. I would say definitely no.

Mr. ROX. Is it acceptable for the physician to train his girl to take certain X-rays, for the pathologist to have high school youngsters trained to draw blood and if she turns out to be pretty good she can be trained to do a number of other things?

Is this acceptable and if not what should be done about it?

Mr. ANDREWS. It is not acceptable in my viewpoint and it is handled under third-party pay restrictions.

There is a system evolving today—I think there are several routes to certification, one through the academic realm and the other through experience regardless of where it may have been obtained and through proficiency and examination be certified to do this.

I think we will continue to see this kind of individual developed.

Mr. ROX. The career ladder does not have to be academic at least in the sense of being in an academic institution?

Mr. ANDREWS. I think career ladder is within an academic institution and I think the competency type of thing, and let me refer to my own institution on this, we have a policy whereby any student can matriculate and challenge any course within the institution to gain collegiate credit so there is the mechanism for the individual who has gained skills, knowledge and competency to have that recognized in an academic realm.

I think what is done in this area and through career laddering can be accomplished through qualifying examinations which have developed in recent years and many of those persons following us from the American Association of Schools of Public Health will comment on this.

Dr. HAMBURG. There are a great many competent people who have been trained on the job by physicians, dentists and others.

We feel it is one of the roles and functions of an academic institution to relieve our practitioner colleagues from the onerous and sometimes tedious task of providing this training and supply him with the people that he needs to help him deliver his health care.

Such on the job training can be very time-consuming and we think

that this intrudes on the daily activities of health care delivery of our busy practitioners.

Mr. ROY. What are the disadvantages of State licensure other than the obvious disadvantage of mobility where there is inadequate reciprocity?

Dr. HAMBURG. One of the unfortunate things that happens with licensure is that it tends to encourage independent action.

One of the concerns I have is that if we are going to move toward a cohesive, articulated health care team, then independence of action should be limited to just a few of the specialties that have the total responsibility for care of the patient.

I just feel that the establishment of separate licensures for a group of proliferating professions is not the correct way to go.

Mr. ROY. I have certainly heard that before. I don't specifically question it except for the fact that licensure does not necessarily need to include the license to practice independently.

Is this not correct?

Dr. HAMBURG. That is true.

Mr. ROY. Licensure by the State, which we hope is being done in the best interests of the people of the State in protecting them from people who are not competent, may also restrict them as far as individual practice is concerned.

Dr. HAMBURG. The unfortunate problem is that the language of most of the statutes has to be nebulous with regard to the definition of health care.

It thus can be considered to be all encompassing and all inclusive and might be interpreted incorrectly by special interest groups as giving them a privilege of independence of action.

Mr. ROY. I agree that we don't want the respiratory therapist or other technologists setting up practices and making claims as to what can result from their treatment of the individual.

Dr. HAMBURG. Exactly.

Mr. ROY. I believe I am correct that this business of certification and licensure is still at the point of arm wrestling, however, and it has not been finally decided. This is indicated by the fact that all of these allied health professions are licensed in some States and a number of the associations are still going forward in an attempt to receive the privilege of being licensed in other States.

I am not sure whether this was pertinent to our discussion of our bill, but I think it is something that the committee probably needs to have in mind as we write legislation, Mr. Chairman.

I thank you very much for your testimony.

Thank you Mr. Chairman.

Mr. ROGERS. Dr. Carter?

Mr. CARTER. Thank you, Mr. Chairman.

I am interested in your response, Dr. Hamburg, with which I am in agreement.

I think possibly after finishing schooling, a person should receive certification rather than licensure. With licensure almost goes the right to practice that profession. I think in many cases it could cause great difficulty.

I was very much interested in what you had said, Mr. Andrews, in that you would permit a person, although you believe in academic



training and you follow that field, you would permit a person to take an examination if he felt he might be qualified and if he passed such an examination then you would go on to certification; is that correct?

Mr. ANDREWS. That is so; to separate that a little bit, within our institution as I used the example, when one passes such proficiency examinations we do award them academic credit.

I think there is that route for the individual who comes through an academic institution. I think also in the case of individuals such as Dr. Hamburg mentioned who might have been prepared let us say within a hospital environment, within the military, within a private physician's office, there should be an opportunity for that individual to display their knowledge, their competency.

If there are gaps in that, then I think schools or allied health should provide for the upgrading of those individuals.

Mr. CARTER. No matter where they learned it, if they learned it they should be given credit for it.

Mr. ANDREWS. That is correct.

Mr. CARTER. I want to thank you for that.

Sometimes certification causes great problems.

In a different field recently, a friend of mine lived in Houston, Tex.; and his wife was of German origin and intensely interested in music.

She had a degree from an institution in California which was not recognized at the University of Houston. It is my understanding that for a time they refused to recognize her degree, but finally they agreed to give her an examination and when they did give her an examination there was no one there who was qualified to do it.

At the present time, she is the pianist for the Houston Symphony Orchestra, one of the finest symphonies in our country. These things can happen.

In going over allied health professions, of course, I, too, think that these different professions must be part of a team.

For instance, a physician today without a laboratory technician is probably a hewer of flesh and drawer of blood.

He must also have an X-ray technician and in many cases a respiratory therapist. We have so much emphysema and we have so many other conditions in which these different allied professions must be used.

We are very fortunate that we have institutions that are training people in these fields. It is important that they work as a team. I think that the one at the head of the team should be a person who is trained and who is licensed by the State and naturally I feel that she should be a doctor of medicine.

We also recognize osteopathy at the present time. The American Medical Association does. I have noticed in our area particularly we don't have a hodgepodge of training in our technical schools.

Rather, if we have a hospital that needs certain types of technicians, then the community college or the vocational school in that area provides such courses.

I know the Somerset Community College has courses in medical technology, and even in the vocational school at Greensburg, Ky., you have practical nursing and things of that nature taught.

I think that is extremely helpful.

Would you describe, Dr. Hamburg, the types of courses taught at the University of Kentucky in the allied health professions, please, sir?

Dr. HAMBURG. As you know, Dr. Carter, the community college system of the Commonwealth of Kentucky is part of the University of Kentucky and thus is unique. It gives us opportunities to integrate a number of our allied health programs.

At the university, we have four allied health programs which grant degrees at the end of 2 years. Our College of Allied Health Professions offers five programs at the baccalaureate level and three at the master's level, including programs to train faculty and administrators for other allied health programs.

It is our belief that the bulk of education for allied health will come from the 2-year colleges and the technical institutes.

We see the role of a senior university as providing those elements of sophistication that these 2-year schools and technical institutions cannot command and need to conduct and continue their programs.

Mr. CARTER. We hope in some of our laboratory technologists we may get implanted within them or imbued within them the dedication and desire to go further and obtain their master's or doctorates.

Within the lab, within the study of tissues and of blood and of cells and genes and chromosomes lies the solution to many problems. We need to see another Pasteur or Madam Curie and perhaps in this field we will learn the cause of cancer.

We hope so.

I notice, Mrs. Lundgren, you stated that our bill was quite deficient in many areas. Would you like to explain some of those deficiencies?

Mrs. LUNDGREN. I think you interpreted my remarks a little too strongly.

Mr. CARTER. I felt the barb.

Mrs. LUNDGREN. I wanted to make sure that this time, with your committee and with the work of you gentlemen, definitions would be made in such a way for those people who would be held accountable for the educational process, who would be required, or at least encouraged, to do those things which would do exactly the kind of thing Dr. Roy was talking about and what you are talking about—recognition for people whose experiences came in a different way, with credit; that the role of responsibility for the 2-year and the technical institution would be articulated and planned with the upper division college or a university in such a way that from the standpoint of the student it looked like one pathway; or that there were options for the advancement of that person in their chosen specialty that we have not encouraged in the past.

Those of us who have programing such as Dr. Andrews described did it not because we were encouraged by any funding, but because we saw a need as educators and as responsible people in the allied health area.

I would like to see that changed.

Mr. CARTER. Would you describe the different programs you have in Miami-Dade Junior College?

Mrs. LUNDGREN. Miami-Dade Community College is a part of the State system. In Florida, the junior college system is separate from the university system and the vocational system.

We have three postsecondary educational systems. We are doing a better job now of articulation. That has been one of the things we have had to do.

At Miami-Dade we have eight associate degree programs which include dental hygiene, medical laboratory technology, medical record technology, mental health technology, nursing, optometric technical science, physical therapy technology, and respiratory therapy technology.

In all eight areas, we are now working actively to have a 2-year extension of that program so that even though the person has a generic credential at the end of 2 years, they have the option to go on.

In addition to the eight associate degree areas, we have two planned certificated areas, in operating room technology and practical nursing.

We now have a special program for licensed practical nurses to become eligible for registry as RN's in 1 calendar year.

In the areas of special service programing, we do the emergency care training for the highway patrol, fire department, and police departments in Broward-Dade area.

We also provide special programs for people already employed in the veterinary science, nursing home administration, and the continuing education in nursing required under Florida licensure.

Another category of programs is what we call in-agency programs. The college goes to the medical center with a planned program for people employed at the medical center in lower level working conditions. We have a special 18-month program in practical nursing for people who are aides and orderlies at the present time.

Out of the 300 practical nurses now employed there, over 200 came from that program. So, it is a way of upgrading and making sure that what is usually a short-term employment becomes a long-term employment for that individual.

Mr. CARTER. Bull's-eye. You have done a great job. It is tremendous. I think it is a great program that you are offering there. I do not see how anyone could fail to support it.

Thank you.

Mr. ROGERS. Mr. Hudnut.

Mr. HUDNUT. Thank you, Mr. Chairman.

I appreciate the testimony that all of you have given, and as a non-doctor on the panel this morning, I would like to ask a few questions.

First of all, would one of you just give me for talking purposes an off-the-top-of-your-head definition of allied health personnel with a couple of examples, and then allied health center. How do you define a center?

Mr. ANDREWS. First of all, I would be pleased to comment on the definition. The one that I think is acceptable to most allied health professionals today is in source book 21 of HEW. Just in a simple definition I have often stated the allied health professionals were personnel who are those individuals who work with individuals, professionals in the prevention of disease, diagnosis of disease, treatment of disease, rehabilitation, recognizing also that a part of prevention brings in the whole area of environmental health.

So, it is not only personal health services but environmental health services in these areas.

Mr. HUDNUT. That is the way we defined it in the bill.

Now, the center?

Mr. ANDREWS. About 3 years ago the Carnegie Commission came out with a report on such centers. It was also utilized in the regulations for the 11 area health education centers that were funded a year ago, I believe. At that time, our association took exception to regulations in that it basically required that a medical school be the major agency within that area of a health education center. We see this representation by a medical center, a dental school or schools, schools of pharmacy, schools of nursing, schools of allied health so that there is an opportunity especially and there should be in the clinical education for those individuals as students, medical students and all to be able to partake of their education in a team effort. If we wait until they complete their education I think the possibilities of teams and understanding relationships of types of personnel is pretty well lost.

So, I think this is a basic ingredient. I think also through this type of arrangement some of the course work actually given in either a didactic setting or specialized laboratory can point toward this team effect.

Mr. HUDNUT. Is this chief thrust of a center educational rather than, say, clinical or therapeutic?

Mr. ANDREWS. Yes; the real thrust is educational. If you move over into the delivery side, then we start talking about, for instance, health maintenance organizations and delivering other care. However, it is recognized that certain service would be rendered to patients within the health education setting.

Mr. HUDNUT. I want to ask you a little bit about health manpower. Are nurses included in your definition of allied health personnel?

Mr. ANDREWS. As it is stated, nurses could be included. Of course, nursing as a profession is recognized not only through the American Nurses Association but academically for the National League for Nurses.

A rather interesting thing is language and from my own personal point of view on this, you will find within schools of allied health at the associate degree level, the majority have a nursing program as a part of that division or school.

In my own situation, I have a department of nursing within my school of allied health. Three are, of course, the baccalaureate and graduate programs in nursing. I am sure this is the situation on Dr. Hamburg's campus. That school of nursing was established many year ago. I actually see them remaining as schools of nursing as such, but I think in discussions I have had with nursing leaders, we have far greater commonality than we do have difference in philosophy or purpose.

Mr. HUDNUT. I am interested in doing anything we can through this legislation and other legislation to assure adequate health care.

First of all, how many allied health personnel are there in America? Does your association that you represent or your school have any rough guesstimates on this, and the second question is do you think it is adequate and, if not, what is the extent of the shortage in your opinion?

Mr. ANDREWS. I am glad you used the word guesstimate.

As I pointed out in my testimony, we need good data collection and analyzation of data. We could say roughly there are a million allied health workers in the United States. This is a guesstimate.

In terms of needs, again, we do not have good manpower needs studies. I do know, for example, in my own situation, that every individual that graduates from our institution—and we graduate about 350 allied health workers per year—everyone that wants to be placed is placed. I think we do see some geographical dislocation for certain types of allied health workers today. The best data—and I question it—again is “Source Book 21” which makes assumptions here, but I do question the reliability of that data. I think a real need exists for data on allied health workers, and I think as we see some sort of national health insurance develop, that will accentuate the need very markedly, and I think we have to be looking to that day.

Mr. HUDNUT. Do you feel there is a shortage but you cannot be specific about the numbers?

Mr. ANDREWS. That is correct.

Mr. HUDNUT. Are there some particular fields in allied health that are understaffed more than others? Do you have more problems recruiting one kind over another or one kind of a technician over another? If so, what are they?

Mr. ANDREWS. This is true. In respiratory therapy, the demand far outstrips the supply.

In the field of occupational therapy, the demand exceeds the supply.

In physical therapy, there is a shortage, but you will find in certain States there are individuals seeking employment, but they are not willing to move to another area of the country.

In radiological technology, I do not think it is as much a question of oversupply but, again, we have fragmented our programs out, but in this case we at our own institution are increasing our incoming class by 25 students because of the need in our own State.

Mr. HUDNUT. Yesterday I had a long talk with Dr. Jack Lukemeyer at IU Med Center in Indianapolis, which I represent. He wanted me to be sure I was here this morning.

The impression he gave me is that H.R. 9341 is, in the opinion of your association, too broad and vague. Where would you tighten it up?

Mr. ANDREWS. I will go back to the testimony I gave. The main thrust that I have suggested on behalf of the association, where the bill could be modified, is to provide for concrete institutional support not on a capitation basis but in the sense of the framework and the program content as well as certain incentive on the side of graduates; to also provide for those schools which do have a desire and will commit resources to get into the ball game.

These are two areas that I think our testimony can be helpful on.

Also, under student support, as I read this bill, it relates primarily to providing support for individuals to prepare themselves to become teachers in allied health programs.

My own personal feeling is that second-year individuals in associate degree programs, third- and fourth-year individuals in baccalaureate programs should be eligible for scholarship or loan programs. In my own institution, 75 percent of our individuals in our schools—and I have some 1,400 students studying—they do require some form of financial assistance.

I think the student has an obligation to move into that second year of a 2-year program, the third- and fourth-year baccalaureate program, and we recognize attrition is less at this point. But, to me, there is tremendous need today for student financial support.

These are the three areas that I see that need to be further developed in the bill.

Mr. HUDNUT. I appreciate that, and it will be helpful to us in our mark-up session. I asked Dr. Lukemeyer if you have some specific recommendations. I am having difficulty dovetailing your five guidelines or categories into our bill. I would like specific recommendations as to maybe where we could change the language or tighten it up and make it more effective in accomplishing the end we all seem to desire. If you could send that to us, I would be most grateful.

Thank you.

Mr. ROGERS. I am going to ask that you get with the staff and give us specific recommendations. I think that would be helpful.

Mr. HUDNUT. The last observation, Mr. Chairman, I would like to direct to you, sir, because you have had such vast experience in the health field.

I got the impression from Mrs. Lundgren's testimony that the problem is not so much with legislation as with regulations and the bureaucracy. I am just a freshman. I have only been here 6 months, but I perceive again that again that the legislative intent of the Congress is perhaps violated, perhaps ignored either willfully or unconsciously, by regulations that are promulgated out of the Secretary's office. As she was ticking through these regulations one after another that seemed to be burdensome and very difficult to adhere to and unnecessary and in some instances mischievous, do I get the impression and is it a right impression that the problem is not so much with our legislation but bureaucratic overregulation in this field?

Mr. ROGERS. It is my impression that there is a shift in regulations and emphasis. I am not sure the law has brought about those shifts.

I noticed there was one statement made saying that the legislative changes have changed the thrust of the regulations. I am not sure that is so. The legislation has been rather consistent in setting forth the program and emphasis on allied health. It simply has not been carried out by the Office of Management and Budget or the Department of HEW. I may be in error on that.

What specifically are you thinking of when you say legislation has brought about these changes?

Dr. HAMBURG. Mr. Chairman, I would like to recant just a bit and admit that in fact sometimes regulations do seem to pervert the intent of the legislation, particularly with regard to authorizations.

The original bill, the Allied Health Training Act of 1966 was very permissive and had substantial authorizations attached to it—in construction, in student support, in basic improvements. Unfortunately, the appropriations that resulted never really met the intent of Congress.

Mr. ROGERS. Nor did the budget request.

Dr. HAMBURG. Yes, sir. So, I suppose part of the problem had to do with proper funding, and the remainder of this was involved in

the regulatory mechanism that sought desperately to use what little money was made available in the best fashion possible.

Mr. ROGERS. I think it would be well for you to let us know if there are areas where you think the law has changed things. It was not my impression that we had brought about dramatic shifts of emphasis other than to try to encourage allied health personnel.

Dr. HAMBURG. Again, I would say it was the attempt by the Secretary of HEW to use the limited funds in the best way that tended to pervert many things.

Mr. ROGERS. I presume you know of the departmental position that the Secretary of HEW gave in his testimony yesterday through the Assistant Secretary. They opposed this legislation. They do not think we need any help in the allied health field. In fact, they are not even sure allied health people, and this I can perceive from the testimony, do much good and, in fact, they are not sure but what it may make the delivery system more expensive.

Would you think that is a correct approach or statement?

Mr. ANDREWS. I would like to speak to that, Mr. Chairman.

I do not agree with the testimony given yesterday. The funds in allied health have been extremely helpful to those of us who have had an opportunity to utilize them. I think today if you sit in a dean's chair within an institution and you must look at the resources, certainly we need allied health legislation and funding to carry out the roles of our institutions. It is not going to come about in a good quality manner without that assistance.

Mr. ROGERS. Do we have any shortage of allied health personnel?

Mr. ANDREWS. Yes.

Mr. ROGERS. The figures given to us in a study in 1970 by HEW showed a shortage of about 250,000, and projecting a 400,000 shortage by 1980. Do you disagree with that 1970 projection?

Mr. ANDREWS. Not at all. It may be underestimated.

Dr. HAMBURG. If we move into a form of comprehensive health care that includes preventive care as well as long term care, we are going to experience a great shortage of all varieties of health care personnel.

Mr. ROGERS. The Secretary says that the administration will present a plan for national health insurance. You are saying that will accentuate the shortages projected?

Dr. HAMBURG. There is no question about it.

Mr. ROGERS. In the health manpower law, I do not know if you are aware of this, but we put into the health manpower law that the Secretary should make grants to various schools to develop programs for cooperative interdisciplinary programs including projects for training in the team approach for delivery of health service.

What you are telling us is that this provision has not been carried out very well. It is in the law. You are simply saying it has not been done.

Dr. HAMBURG. It is very difficult to encourage this kind of integration unless categorical funding is directed to be used for this purpose.

Mr. ROGERS. I hope we will be able to draw this law a little tighter although the testimony of HEW would seem to say, "Don't tell us what to do. Just tell us what you think is wise."

Dr. HAMBURG. The legislation with respect to allied health has been permissive and obviously in some cases perverted, so such action may not be wise, Mr. Chairman.

Mr. ROGERS. I can tell you that it is not wise. We never know what they will do. This committee has taken the position that after hearing the testimony from experts, we can draw some guidelines for the action we want to see take place. Otherwise, it will never happen. Even when you put it into law, it sometimes does not happen. So, it is not easy to get the bureaucracy to respond even to the law.

They are telling us that they might give you a little help through area education centers. Have you gotten any such help?

Mr. ANDREWS. We are an institutional member of the Grand Rapids Area Medical Education Corp. which is a voluntary effort. That organization did submit an application, but it did not receive funding.

Mr. ROGERS. Thank you very much. Your testimony has been most helpful, and we hope you will get with the staff, Mr. Lawton and Mr. Hyde, and give us some specific suggestions.

Our next witness is Dr. Lester Breslow, the dean of the School of Public Health, University of California, Los Angeles, Calif., and he will be representing the Association of Schools of Public Health.

**STATEMENT OF DR. LESTER BRESLOW, PRESIDENT, ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH; ACCOMPANIED BY DR. MYRON WEGMAN, CHAIRMAN, COMMITTEE ON GOVERNMENTAL RELATIONS; AND RAY COTTON, EXECUTIVE DIRECTOR**

Dr. BRESLOW. Mr. Chairman and members of the committee, I am the dean of the School of Public Health at UCLA. I am appearing here today as president of the Association of Schools of Public Health.

With me are Dean Myron Wegman, School of Public Health, University of Michigan, who is chairman of our Committee on Governmental Relations; and Mr. Ray Cotton who is the new executive director of the Association of Schools of Public Health.

Mr. ROGERS. We welcome you.

Dr. BRESLOW. Mr. Chairman, we appreciate this opportunity to be here in support of H.R. 9341. We have submitted a written statement for the record.

Mr. ROGERS. Without objection, it will be made a part of the record following your summation.

Dr. BRESLOW. In my remarks here, I would like to address three specific issues.

It is my understanding, although I was not here yesterday, that there may have been some confusion arising on these issues: (1) What schools of public health do, (2) what Federal support has done for the growth of schools of public health and, finally, (3) why Federal support is still needed.

In the schools of public health as well as in the practice of public health, the focus is on the health problems of populations rather than on individuals. Emphasis is on the practical solution of community health problems particularly with the preventive approach to those problems.

We judge medical care, environmental health services, health education—all aspects of health care—from the standpoint of what each



does for the control of disease and disability, and for the reduction of premature death in the population.

Schools of public health do three things. We train health professionals, we conduct certain research; and we engage in community health services directly.

Prior to World War II, the schools concentrated on preparing health professionals to deal with the problems of communicable diseases, the health aspects of maternity and infancy, and other health problems that were paramount in that period.

In the last couple of decades, emphasis has shifted to chronic disease and environmental problems. Now we are turning our attention to drug abuse, peer review of medical care, comprehensive health services, the environmental protection services that are being established—emphasizing and trying to maximize their health potential.

Throughout our history, schools of public health have trained professionals such as physicians, engineers, nurses, dentists, and veterinarians to serve in community health endeavors.

In recent years, while continuing to train such health professionals, we have been graduating more students who do not have a previous professional degree. We take students with some background in biological or social sciences, often supplemented by some appropriate work experience, and help them to acquire professional expertise in community health work.

Increasingly we have been recruiting from the minority and disadvantaged segments of the population.

Research by members of our faculties ranges all the way from Nobel Prize-winning discoveries of new techniques for handling viruses to more modest discoveries such as that health maintenance organizations—at least in their prototypical form—actually do provide a greater amount of health maintenance services than do other forms of medical care.

Schools of public health draw upon the many disciplines represented in universities, including biological and social sciences, public administration, and engineering to solve the immediate health problems of communities. We also engage extensively, as faculty and as graduate students, in community service. A part of our work is continuing education. For example, the five schools of public health in the western part of the United States have established a consortium which brings university level courses to people working in the field of public health, close to where they work, minimizing time away from jobs. Incidentally, the schools have contributed financial aid as well as faculty and other resources to this program out of Federal funds coming to the schools.

Our graduates overwhelmingly enter careers in public health, in the public sector, only rarely being employed in the private sector or self-employed as professionals. I am sure you appreciate what this means so far as their incomes are concerned. Their incomes are much lower than the incomes of comparable health professionals in private or self-employment.

The program of Federal support that has been in effect for the last 15 years has greatly enhanced education for public health work. It has increased the number of schools from 11 to 18. That support has been largely responsible for tripling the number of graduates each

year over the total 15-year period and for quadrupling the present enrollment.

We believe that Federal support is still needed, among other reasons, because the Congress continues appropriately to add to health services in this country.

For example, last year amendments to medicare and medicaid sharply expanded the role of State health departments in health care; to establish certification programs for facilities under medicaid as well as under medicare; to review the quality of services rendered under medicaid and to carry out comprehensive health planning activities that would eliminate waste in capital expenditures.

I understand that yesterday you had testimony indicating in part—and we emphasize our view that the testimony showed only in part—the need for certain categories of professional public health personnel. Those needs will continue to grow over the rest of this decade, even taking into account the anticipated growth of schools of public health. The deans of the schools of public health can further attest to the need expressed in the continuing streams of letters that we get, advertising really excellent opportunities for people who are graduates of our schools.

Three challenges are commonly and appropriately put to those advocating continued Federal support to schools of public health: First, has the program worked? Second, is support still needed? Third, can funding be assumed by State government or the private sector?

We believe we have indicated in the data presented here and further in our written testimony that the program has indeed worked.

Further, we believe that evidence is overwhelming that support is still needed.

We believe, finally, that it is necessary for the Federal Government to continue participating in funding schools of public health.

More than one-third of the graduates of the schools of public health enter upon employment in Federal, State or local Government largely in health work resulting from Federal programs. Almost all of the remainder enter into the public sector, into education or other non-profit employment, into work arising to a considerable extent from the increasing number and scope of Federal programs.

There are 18 schools of public health located in 15 States, one-third in private universities, two-thirds in public universities. It is unreasonable to expect a few States to appropriate sufficient funds for graduate education in public health of students from the 40 States that do not maintain schools of public health in State universities.

It is equally unreasonable to expect the handful of private universities that maintain schools of public health to supply the Nation with sufficient public health manpower. Only a joint effort of the Federal Government together with private and State universities that have established schools of public health will yield the necessary manpower.

Now, Mr. Chairman, turning more directly to the bill itself, we have a few points that we would like to advance to you. They are in our written testimony and we would like to work with the members of the committee and staff on these.

There is only one to which I would like to direct brief attention this morning, and that is in section 791(b) subparagraph A, on page 5 of the printed bill.

We call attention to the possible confusion that may arise from incorporating into one section of the bill support both for institutions—schools of public health—and for certain programs—health administration and health planning, some of which are provided in schools of public health.

About a third of the accredited programs in health administration are in schools of public health; the rest are not.

We would, therefore, suggest putting into two separate sections of the bill support for these two different but overlapping kinds of endeavors.

Thank you very much, Mr. Chairman. We will be pleased to respond to any questions you might have.

[Testimony resumes on p. 100.]

[Dr. Breslow's prepared statement and attachments follow:]

STATEMENT OF DR. LESTER BRESLOW, PRESIDENT, ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH

Mr. Chairman and distinguished members of the Committee, the Association of Schools of Public Health greatly appreciates the opportunity to appear before you and to give you an overview of the Schools of Public Health's 15 plus years of experience in dealing with the legislation you intend to replace with H.R. 9341. For the record my name is Dr. Lester Breslow and I am the Dean of the School of Public Health at UCLA. With me is Dr. Myron Wegman, Dean of the School of Public Health at the University of Michigan, and Mr. Ray Collins, executive director of the Association.

In the interests of clarity of presentation, our remarks will be presented in two main divisions: first, a general overview which sets out our philosophy regarding support for the Schools of Public Health and describes generally the place assumed by the Schools in this society; second, we will comment, more specifically, on HR 9341. Included in the present statement is some material that was also presented before this committee on the one-year extension of existing authority for schools of public health. Should you, Mr. Chairman, or any members of this Committee, desire further information, the Association of Schools of Public Health or any individual school would be delighted to supply this.

As you may know the program of Federal assistance to professional education in public health was passed unanimously by the 85th Congress in 1958, and has been extended repeatedly since then, always with bipartisan support and unanimous passage.

The rationale for this legislation is based on the recognition that preservation of the public health requires more than skills and techniques for treating an individual's disease and disability. Rather than just reacting to disease, the better and more rational and economic approach is a judicious combination of prevention of disease and preservation of health, along with improved planning and organization of therapeutic and rehabilitation services.

To prepare the personnel needed to make this approach successful, the nation's schools of public health are unique sites. Because such preparation differs from other areas of health professionals' education in several fundamental ways:

(1) Success in protecting the public health requires that a wide variety of personnel have specialized preparation over and beyond the basic education needed to carry out medical care duties on a one-to-one basis. The need to recognize and solve the problems which occur in a group and community environment requires preparation by a faculty comprising persons skilled in various disciplines, including social and natural sciences, interpersonal relationships, and administrative management, working together in an interdisciplinary setting.

(2) The breadth of resources necessary to develop an accredited school of public health makes it difficult and inefficient for each state to have its own such school.

(3) The great majority of graduates of schools of public health go into public service—local, state, national or international—for which remuneration is generally at civil service scales, well below what private practitioners in the respective fields earn.

The 18 existing schools thus constitute a national resource, serving all 50 states, the Commonwealth of Puerto Rico, the overseas territories and our international commitments.

#### HISTORY OF THE AID PROGRAM AND ITS EFFECT ON PREPARATION OF HEALTH PERSONNEL

The Welch-Rose Report in 1916 was a milestone in its recognition that medicine and physicians could not by themselves combat the conditions and problems that were the cause of excessive mortality and morbidity. Indeed, the rates applying in the so-called developed, wealthy nations then were comparable to those in the developing countries today. Dr. William Welch, then Dean of the Johns Hopkins Medical School and Mr. Wickliffe Rose, President of the Rockefeller Foundation, noted that medical science had to be combined with sanitary science, engineering, social science and management skills for a community approach. As a result of their report the Johns Hopkins School of Hygiene and Public Health was founded in 1916 and received its first students in 1918. It was followed in subsequent years by schools at Harvard, Columbia, North Carolina, Michigan and Yale to meet the steadily increasing demand for graduates. This demand began to escalate sharply in the mid-1950's.

By 1958 financial constraints were making it very difficult for the 11 accredited schools to meet the needs for graduates or to accept more than a reduced percentage of qualified applicants. Funds derived from tuition payments and from state appropriations or endowment funds were quite inadequate to meet educational needs. The situation was aggravated by the increasing number of applicants stimulated by Federal-state collaboration to expand previously inadequate health programs.

The Federal support program that began in fiscal year 1959 was designed to help the schools accept more of the steadily increasing number of applicants, chiefly by supplying the extra funds needed for teaching faculty and teaching support. Existing schools responded promptly to the Federal request by expanding student bodies and new schools were opened.

In 1958 there were 1,230 students enrolled and 772 graduates (11 schools), while in 1971-72 there were 2,159 graduates (17 schools), (Table I) almost three times the number 14 years earlier. Since 1969, as personnel needs of local, state and Federal agencies have mounted, the enrollment has increased even more sharply.

In the Fall Term of 1969, in the then 16 schools (the University of Washington began admitting students in 1970 and Illinois in 1972) the enrollment was 3,438. In contrast, the Fall Term enrollment in 1972 was 5,320, an increase of 50% in the three years (Table I). This increase, at a time when many other university graduate schools were remaining level or had decreasing numbers of applicants, was clearly related to expanding public interest in health care.

During the years this program has been in effect the schools have changed substantially to keep pace with demands for new and different kinds of personnel. With the mounting problems of aging, more attention could be given to non-infectious and chronic disease. With the growing complexity of industrial processes and occupational disease, greater emphasis has been placed on environmental and occupational health. With lower death rates in infancy and childhood more could be done in family and population planning.

At the same time long-standing public health programs, such as control of communicable disease, protection of food and water supplies and protection of maternal and child health, are still vitally important in the community. One has only to read of instances like the recent recurrence of typhoid fever in Florida and diphtheria in Texas, the detection of dangerous foci of poliomyelitis in inner city areas, the disturbingly high rates of venereal diseases, the reports of food poisoning outbreaks and the failure to apply uniformly advances in knowledge of maternal and child health, to realize that neglect of traditional programs presage as severe dangers to the public as neglect of fire protection might.

In more recent years the changes have been in still other directions. Passage of major health legislation expanding personal health services, comprehensive health planning, the program of bloc grants as well as project grants to state health agencies and the development of neighborhood health centers, has required much larger numbers of administrators, managers and new types of support personnel who understand that health prevention and restoration cannot be approached purely as a market phenomenon. The need will be further increased by any of the various proposals for reducing the financial barriers to medical care and by PSRO.

All of the schools of public health have adapted their teaching programs well beyond previously traditional areas to prepare personnel for new and expanded

responsibilities at all levels of government. These personnel, administrators, planners and specialists from almost every discipline in the natural and social sciences, are prepared to work in such areas as:

Comprehensive health planning, organization and delivery of health services, family and population planning, nutrition, health problems of the aging, drug abuse and alcoholism, control of quality of health facilities, and health education of the public.

Furthermore, regardless of what agency of government has responsibility for environmental control, the very fact that popular attention has shifted to non-health aspects of protection of our natural resources—air, water, land—makes it vital that the health aspects of the environment not be neglected. Again, the typhoid outbreak in Florida is a case in point. Pathogenic organisms do not recognize social and economic barriers. Moreover, passage of the Occupational Safety and Health Act has imposed an even greater government responsibility for worker health. Schools of public health will need to meet expanded demand for industrial hygienists, industrial nurses, air pollution control experts and administrators of occupational health programs.

Much of the greatest current public concern in regard to health has been over the high costs of medical and hospital care. It is to prepare personnel capable of attacking these problems that the schools have given priority. Only by primary attention to better methods of prevention and by better planning and organization of curative and rehabilitative services can high costs be contained. An approach which is purely an "indemnity-insurance" solution may succeed in spreading costs but will not succeed in taking advantage for society of available knowledge which can lower health costs by helping prevent people from getting sick in the first place.

#### CURRENT NEEDS FOR PERSONNEL

In former years, information could be readily obtained from the Public Health Service on vacant budgeted positions in health departments, as one measure of personnel need. The last full scale study on this, carried out for the Third National Conference on Public Health Training 1967, indicated that vacant *budgeted* positions, just in state and local official health agencies (not even including non-profit community agencies), for which the post description required one year of graduate training in public health, far exceeded available or anticipated supply. With growing population and expansion of programs like Medicare and Medicaid, the ratio of unfilled positions to available graduates is probably even higher today.

Since the 1967 study, there have been no national scientific studies to establish accurately the precise shortages. Nevertheless, studies carried out in a number of states, such as that carried out by a Legislative Study Commission in North Carolina have established needs for personnel far in excess of graduates available.

As part of a study of where graduates of schools of public health are now working and of a series of facts relating to their training, a table has been prepared of the place of employment of the 1962-72 graduates. (Table II). This table was constructed by coding addresses of graduates from which the employment category could be deduced. The data will, of course, need to be corrected when the questionnaires are returned and analyzed, but even this rough assumption gives an idea of the order of magnitude of the various categories.

What is most striking is the wide variety of employment these graduates have in government, universities and other forms of public service in the health care system.

In addition to tabulated data available, another practical measure of need is the number of requests that come to educational institutions for graduates in a particular field. At the University of Michigan, for example, the largest school of public health in the country, every program of study reports more job inquiries and more requests for graduates than are available. As one example, last year there were 50 urgent requests for Masters of Public Health who had specialized in Industrial Hygiene, yet there were only 5 graduates in that field that year.

In contrast to the statement in the budget document\*, the Administration's proposed 1974 budget actually further increases the demand for experts on matters of public health. Decentralization of services to state and local levels re-

\*"There is evidence of continuing national need for increased numbers of professionals in medicine, dentistry and osteopathy. The same urgency is not evident in other health professional fields." (From page 35, Document of President's Budget, HEW, released January 29, 1973)

quires that these units of government directly engage the services of many new people skilled at planning, developing, implementing, and evaluating health service programs. Guidelines and supervision previously provided at the national level must now be prepared and implemented at every local level of government. This emphasis is recommended at many points in the budget message. It is an emphasis which will not conserve public health manpower; it will require vastly increased numbers. In the long run this increase in personnel and their increased emphasis at the local level, may bring enormous benefits to the people served by health agencies and programs. But the workers are simply not now available.

#### LEGISLATIVE SITUATION

In 1972, when testifying on a Senate bill to extend Sections 306 and 309, Assistant Secretary DuVai, speaking for the Administration, raised no questions about the validity of Federal aid to professional education in public health. He did ask that the legislation be extended for one year to allow these sections to be considered in conjunction with other expiring legislation. Furthermore, the President indicated concretely his support for the program by proposing, in his original 1972-73 budget, increases in levels of support—almost 7% for Section 306, student support, and almost 20% for Section 309, institutional support. On the basis of hearings and testimony, the Congress further increased these levels, indicating that both the executive and legislative branches were aware of increasing need for trained health personnel.

The 1973-74 budget, submitted on January 29, 1973, proposed a complete reversal of previous policy, calling for no extension of the legislation and for complete termination of all aid under Sections 306 and 309 as of June 30, 1973 (Table III). In its wisdom the Congress did indeed extend these sections for one year, and funds have been included in the continuing resolution. We fervently hope that the Administration will expend all these funds.

#### ADVANTAGE OF FLEXIBLE SUPPORT

One of the great advantages of the formula grant was that it allowed individual institutions to vary the support in accordance with the overall demand for personnel and the particular strength of other resources of the school. For example, a department like biostatistics, one of the fundamental sciences necessary to every student in every field of the school of public health, needs to expand proportionally as the total student body expands. The need for this kind of preparation cannot be measured, therefore, in the need for specialized statisticians as such. In some of the older institutions a nucleus of faculty of biostatistics has long been established, but even this nucleus had to be expanded with growing general enrollment. In the newer schools, on the other hand, there has been even greater need for strengthening in this and other basic fields of instruction.

Many other examples of the value of flexibility may be cited. Indeed, this concept of the formula grant is quite consistent with the general policy enunciated by President Nixon, a policy all of the schools support in principle, that Federal aid should be so adjusted as to allow a maximum amount of decision-making at local level.

#### FLEXIBILITY AND CONTINUING EDUCATION

Because of the extended distances in the west, the widely scattered needs of the various health jurisdictions and the large numbers of personnel needing preparation, a unique consortium was initiated among the schools of public health in the west, now comprising the University of California at Berkeley, the University of California at Los Angeles, the University of Hawaii, Loma Linda University and the University of Washington. The primary goal of the consortium is to enhance the skills and effectiveness of health professionals through the provision of university-level continuing education courses in the field, close to their place of work, thereby minimizing the time away from the job and maximizing the opportunity to maintain contact with the schools of public health. Each of the schools contributes financial resources to the program, basically from their formula grants. These contributions make up the major portion of the core budget of the program, supporting staff salaries and travel, rent and other operational expenses.

In the past three years this program has offered approximately 37 courses a year with an average attendance at each course of 50 or an average yearly total of 1,855. In the 14-year period nearly 20,000 individuals have completed one or

more of the different courses available through this sponsorship. Courses have dealt with immediate problems such as the "mind altering drugs," "community organization," "problems of the socially disadvantaged," and many others. This kind of program illustrates the flexibility of approach which tries to bring professional training as adapted to the changing needs of society and to do it in a way that disrupts as little as possible students' regular activities.

#### STUDENT SUPPORT

Up to the present time among the 18 accredited schools of public health a total of 22.5% of all students, 1198 in number (Table IV), have been receiving some support through the General Purpose and Special Purpose Training Grants. The proportion varies from a low of 8% in some schools to a high of 40 or 50% in others.

In addition, 30% of the student body, 1,598, are supported through other Federal training grants. These fields of special priority comprise both specialized professional training, such as maternal and child health, comprehensive health planning or mental health, and research training in such fields as epidemiology, organization of personal health services and environmental control.

Thus, in total, over 50% of all students in schools of public health currently receive some form of Federal support. Discontinuance of student support programs would have a great adverse effect on future admissions.

Discontinuance of the existing traineeship program sharply limit enrollment of students from disadvantaged groups and from the lower economic strata. The need to maintain a multidisciplinary faculty, to carry on instruction in a number of specialized areas, to handle a mix of students varying widely in age and prior preparation, requires that tuition costs be consistently high. In addition to this, costs for room, board and books have increased steadily. Even with current stipend levels students have a hard time making ends meet. It must be further recalled that because of the nature of the program, many of these students undertake training in mid-career and, thus, usually have a family and other responsibilities making them quite different from the classical undergraduate student who needs relatively little to keep going and can get a job on the side to help support him.

Should public health traineeships be discontinued, it may be expected that students in schools of public health would either come from families with more resources or would, if they did borrow money, gravitate to fields with greater opportunity for financial return than public service, to permit easier repayment of the loan.

#### SUMMATION—PART I

Over the 15-year period that the program of Federal aid to professional preparation of public health personnel has been in effect, the schools of public health and related institutions have expanded steadily to meet society's demands.

Because of high teaching costs and the limited remuneration anticipated by most graduates a small number of schools have become a natural resource and have assumed responsibility for preparation of personnel for all 50 states, the Commonwealth of Puerto Rico, the territories and overseas commitments.

The expansion has been related to need, as reflected in applications and in employment opportunities for graduates in official and unofficial community agencies. Much has been done by the Schools of Public Health over the past decade and a half—but much more remains to be done.

#### PART II: H.R. 9341

Turning now more specifically to the bill under consideration—HR 9341—we would like to direct attention to a few points. We are concerned that the definition of public health in section 790 is too narrow. Our graduates are engaged in a great variety of health activities. As an example we would like to see the word "health" substituted for the word "medical" in section 790.

The proposed project grants and contracts language in section 791A would advance public health training by stimulating the development of new types of education. It is this type of authority to which the schools look for funding new and often untried experiments in the field of public health. In general we feel that the



project grants and contracts section ought to be as broad as possible so that developmental activities which none of us might foresee at this moment would be supportable under this section.

On the other hand, we wish specifically to compliment the draftors of section 791A(a) and to express our strong support for the goals envisioned by paragraphs (a) (1) through (a) (8). We agree specifically with the ends sought by these paragraphs, but would urge the inclusion of broader language so that more and wider experimentation and development would be permitted.

Turning now to section 791B, we wish to congratulate the Committee on providing for institutional grants to schools of public health. In many ways this type of grant may be considered the life blood of the Schools, especially so because it encourages flexibility and expansions in the training programs. We also concur that the Institutions receiving such grants be accredited by a recognized body approved for such purposes by the U.S. Office of Education. Furthermore, we are in complete agreement with the principle that there be a *quid pro quo* for institutional grants.

For the sake of historical perspective, it should be noted that for the last 15 years the schools of public health have had an identifiable section of the law to which they could look for formula grant support. During that 15-year period, as we believe our earlier testimony has shown, the schools of public health have served the nation well and have indeed delivered a *quid pro quo*.

In examining section 791B we are concerned that in a single section the bill would combine support for schools of public health and certain more specific programs. These programs in health administration and health planning may be conducted in schools of public health or in other schools at different universities. In our view it may be confusing to treat programs like these in the same section as schools of public health where the primary focus is institutional support.

Most of the schools of public health now conduct accredited graduate programs in health administration and these constitute about one third of all such accredited programs in health administration. Certain schools of public health carry out excellent graduate education in health services and health services research, but have not sought separate accreditation for these specific programs. Some schools of public health also conduct specific programs in health planning. Therefore, the schools of public health believe that such programs serve a useful purpose. We merely express concern about language which we believe would inevitably lead to confusion between *Schools of Public Health* and specific *programs* in a particular public health area.

We do recognize and greatly appreciate the obvious effort in drafting the bill to protect the schools under section 791C(b). We believe, however, that this matter could best be handled in a separate section devoted entirely to schools of public health.

As is evident from our earlier testimony, we fully endorse the traineeship provisions contained in section 792.

Concerning section 793, we agree completely that such information is desperately needed and we pledge the support of the schools of public health to the effort by the Federal Government to acquire this data.

Mr. Chairman and members of the Committee, we greatly appreciate the opportunity to express our views and would be happy to answer any questions you may have and to submit any further information you desire. Thank you.

TABLE 1.—ENROLLMENT AND GRADUATES, U.S. SCHDLS OF PUBLIC HEALTH, 1958-72

	Students enrolled	Degrees granted
Fiscal year ending:		
1958.....	1,230	772
1963.....	1,848	798
1968.....	3,363	1,337
1969.....	3,525	1,548
1970.....	3,483	1,735
1971.....	4,131	1,782
1972.....	4,802	2,159



TABLE II.—ESTIMATED DISTRIBUTION BY EMPLOYMENT IN 1972 OF PUBLIC HEALTH GRADUATES FROM 1962 TO 1972

Employment category	Number	Subtotal percent	Total percent
Federal			14.1
Directly related to public health (HEW, USPHS, HSMHA, etc.)	876	6.1	
Other Federal, not directly related to public health (State Department, trust territories, AID, FCC, AEC, etc.)	158	1.1	
Peace Corps	29	.2	
Veterans' Administration	43	.3	
Armed Forces (includes Armed Forces hospitals)	919	6.4	
State	1,408		9.8
Local (includes RMP, CHP, city, municipal)	1,652		11.5
Foreign (includes nonpublic health: e.g. ministry of education)	1,063		7.4
Extrnational (WHO, UN, OAS, NATO, SEATO, etc.)	230		1.6
Hospitals and ambulatory care facilities (except university hospitals, USPHS, and Armed Forces hospitals)	3,348		23.3
Universities			25.4
Schools of public health	1,149	8.0	
Medical and nursing schools and hospitals where teaching is primary activity	1,379	9.6	
Other university	1,121	7.8	
Industry (includes profitmaking organizations, e.g., engineering, pharmaceuticals, communications)	359		2.5
Health industry (includes public health directed profitmaking organizations, e.g., insurance and casualty firms)	57		.4
Foundations	417		2.9
Professional organizations	29		.2
Nonprofit organizations (Kaiser Permanente, Blue Cross, etc.)	86		.6
Labor unions	0		0
Self-employed	43		.3
Total	14,366		100.0

Source: Personal communication from Dr. Arthur H. Richardson, project director, ASPH-BHME Contract Study. Estimates are based on a weighted extrapolation of the distribution by employment of 5,771 graduates who had codable addresses. The remaining 8,595 graduates (14,366 in all during the 1962-72 period) were either listed by home addresses or had addresses not codable by employment category.

TABLE III.—APPROPRIATIONS

Fiscal year ending	Sec. 306 <sup>1</sup> appropriations	Sec. 309(a) <sup>2</sup> appropriations	Sec. 309(c) <sup>3</sup> (formerly 314(c)) appropriations
1957	1,000,000		
1958	2,000,000		
1959	2,000,000		450,000
1960	2,000,000		1,000,000
1961	2,000,000	1,430,000	1,000,000
1962	2,000,000	2,000,000	1,900,000
1963	4,000,000	2,000,000	1,900,000
1964	4,195,000	2,000,000	1,900,000
1965	4,500,000	2,500,000	2,500,000
1966	7,000,000	4,000,000	3,500,000
1967	8,000,000	5,000,000	3,750,000
1968	8,030,000	4,500,000	4,000,000
1969	8,000,000	4,917,000	4,554,000
1970	8,000,000	4,917,000	4,554,000
1971	8,400,000	4,517,000	5,054,000
1972	8,400,000	4,517,000	5,554,000
1973:			
President's budget	9,000,000	6,000,000	5,940,000
Revised budget	9,000,000		5,940,000
1974	0	0	0

<sup>1</sup> Sec. 306—traineeship support, general purpose (schools of public health only), special purpose short-term training programs, and certain other specialized programs.

<sup>2</sup> Sec. 309(a)—project grants for institutional support, for programs judged to be especially needed, open to any non-profit institution or agency.

<sup>3</sup> Sec. 309(c)—formula grant; total sum divided among all accredited schools of public health,  $\frac{1}{3}$  equally and  $\frac{2}{3}$  in proportion to federally sponsored students.

TABLE IV.—STUDENTS ENROLLED IN SCHOOLS OF PUBLIC HEALTH, FALL TERM 1972—SHOWING SOURCE OF FINANCIAL SUPPORT

School	Total number students	Sec. 306, <sup>1</sup> PHSA		Other Federal sources		University funds		Other non-Federal sources		Self support or unknown	
		Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent	Number	Per-cent
California—Berkeley.....	348	139	39.9	108	31.0	6	1.7	29	8.3	66	19.0
California—UCLA.....	381	162	42.5	53	13.9	0	0	13	3.4	153	40.2
Columbia.....	154	41	26.6	43	27.9	3	1.9	12	7.8	55	35.7
Harvard.....	217	19	8.8	118	54.4	14	6.4	29	13.4	37	17.0
Hawaii.....	146	75	51.4	44	30.1	0	0	6	4.1	21	14.4
Illinois.....	37	9	24.3	2	5.4	0	0	9	24.3	17	45.9
Johns Hopkins.....	489	52	10.6	225	46.0	36	7.4	74	15.1	102	20.8
Loma Linda.....	256	64	25.0	15	5.8	13	5.1	10	3.9	154	60.2
Michigan.....	690	181	26.2	255	37.0	63	9.1	60	8.7	131	19.0
Minnesota.....	356	60	16.8	113	31.7	0	0	60	16.8	123	34.6
North Carolina.....	494	92	18.6	207	41.9	41	8.3	67	13.6	87	19.6
Oklahoma.....	214	19	8.9	61	28.5	6	2.8	3	1.4	125	58.4
Pittsburgh.....	367	44	12.0	108	29.4	15	4.1	18	4.9	182	49.6
Puerto Rico.....	415	96	23.1	77	18.6	11	2.6	105	25.3	126	30.4
Texas.....	292	24	8.2	34	11.6	0	0	9	6.5	215	73.6
Tulane.....	228	28	12.4	45	19.7	17	7.4	39	17.1	99	43.4
Washington.....	112	34	30.4	59	52.7	0	0	4	3.6	15	13.4
Yale.....	124	59	47.6	31	25.0	5	4.0	6	4.8	23	18.5
Total.....	5,320	1,198	22.5	1,598	30.0	230	4.3	563	10.6	1,731	32.5

<sup>1</sup> Includes general purpose and special purpose traineeships.

Mr. ROGERS. Thank you very much, Dean Breslow, and gentlemen.

How many foreign students would you say are trained in the schools of public health.

Dr. BRESLOW. There have been a substantial number of foreign students over the years, but the proportion is rapidly being reduced both because fewer foreign students are coming here—more countries are developing their own schools—and because we have had increases in the number of American students.

I would have to estimate—and we would be glad to obtain a more exact figure—less than 10 percent or less.

Dr. WEGMAN. I think it might be 10 percent and roughly half of those are sent to schools by the U.S. Government.

Mr. ROGERS. Many of them have to come over here because there is no place for them to be trained in their own country.

Many of these people who are trained and are included in the figures for the total output of the schools of public health, cannot be counted upon to serve in this country because they will have to go back to their own nation. Some of them stay but many of them go back to their own countries.

Dr. WEGMAN. Not many stay; most of them go back.

Mr. ROGERS. How many schools do you think would be in real financial trouble or might have to close if we do not continue the Federal program?

Dr. BRESLOW. I would say all 18 would be in real trouble. I have not heard a dean of public health say anything different from that. I would say it is very important for all the schools of public health.

The blow which fell on us with the administration's proposed budget for 1974 forced a life-threatening crisis in three or four schools. They seriously had to consider, and I believe they still may be considering whether they can continue and what they can do in the future.

Mr. ROGERS. Let me ask you this: Do students come from all of the 50 States to these 18 schools?

Dr. BRESLOW. Yes, sir, they do.

Mr. ROGERS. So, it is not just people from the one State where the school will be located that you are training?

Dr. BRESLOW. That is correct. With Federal funds that the schools have been receiving, the State schools, as well as the private schools have been quite careful to admit students from other States, not just from the States that have established schools and have been putting up most of the support for them.

Dr. WEGMAN. This year we have students from 39 States in addition to the students from Michigan.

Mr. ROGERS. I presumed that to be the case, and that was one of the bases for the original legislation.

What would happen to the communities or the counties if all of this support failed and the schools did go out of existence? Would that have an impact on the number of public health doctors? What would happen? What would be the impact?

Dr. BRESLOW. There would be a serious impact on the production of health doctors and other public health personnel. Further, we believe the programs that have been built up over the years to protect and advance health, and more particularly the programs that are coming along now, would flounder. The loss of a stream of adequate qualified personnel to direct and staff those programs would have a serious adverse effect on public health.

Mr. ROGERS. What do public health doctors do? Why is it important to the public? People don't know. Why don't you tell us? Do they have any impact on public health?

Mr. CARTER. If the gentleman would yield, I would like to ask those very questions. That was part of my line of questioning to show the reason for and the advocacy of the Federal health service.

For instance, Doctor, do we have much smallpox in the world today?

Dr. BRESLOW. No, sir, smallpox is now confined to a very few countries of the world largely as a result, I should say, almost entirely the result, of knowing the nature of the disease and public health efforts.

Mr. CARTER. And by physicians trained in the United States and elsewhere. Perhaps we now have smallpox in one country of the world—Bangladesh. There may be a little bit more, but it is a hope that this disease will be obliterated within the next year or so.

Dr. BRESLOW. That is correct.

Dr. WEGMAN. There are no longer any cases in the Western Hemisphere.

Mr. CARTER. What about polio? Do we have much of that anymore?

Dr. BRESLOW. Whereas only 20 years ago there were tens of thousands of cases of poliomyelitis occurring annually in this country, and many children died or were crippled for life each year as a result of polio, today that disease is a rarity. Now it is a cause for great alarm to have a case or even a suspected case of polio.

Mr. CARTER. You have administered that program throughout our country?

Dr. BRESLOW. That is right; public health personnel have done so.

Mr. CARTER. We have had problems recently in venereal disease programs but actually it has diminished greatly through the efforts of the public health service.

Dr. BRESLOW. That is correct, especially during and right after World War II. In more recent years, partly due to the loss of Federal initiative and support in the venereal disease field, venereal disease got out of hand and we have had to go to work on it all over again.

Mr. CARTER. It does not compare to what it used to be. I can recall when syphilis was rampant. You would see secondary eruptions on the skin and saber-skin babies and men with tabes and those who thought they were queen of the May.

Dr. BRESLOW. You do not see tabes very often now.

Mr. CARTER. Is typhoid much of a problem anymore?

Dr. BRESLOW. No; the occasional cases arise mainly from our people visiting foreign countries, and occasionally grandmothers who still are carriers will give the disease to grandchildren. We have had very small outbreaks of diphtheria in recent years, enough to keep up our vigilance. The job has not been completed but it has been so reduced through public health efforts that it is no longer a major problem.

Mr. CARTER. I want to thank the distinguished physician for his testimony. I think this states well the case of the Public Health Service, and I thank you.

Mr. ROGERS. Thank you for that contribution.

Dr. BRESLOW. May I extend my response just a little bit?

You referred to some very important public health problems, diseases over which we now have largely achieved control. We are proud of our work in connection with them.

We would point out, however, that the schools of public health are not content with teaching students about those problems, and how we must continue to deal with them. We still maintain vigilance. But now we are concerned with another generation of problems that affect our people from the health standpoint and will do so for the next several decades: problems of chronic disease, the environment, the cost and quality of medical care.

To go back to your question, Mr. Chairman, about what public health physicians and others in public health do, let me mention only a few examples: Environmental health services that are now rapidly expanding as a result of our Nation's determination to improve the environment and particularly to protect the adverse effects of pollution; management of personal health care services, the increasingly complex hospitals, other institutional services, health maintenance organizations and other forms of organized care; planning and developing new forms of health care, especially ambulatory care, primary care, organized care; comprehensive health planning mandated by the Federal Government and still largely to be carried out by the Federal Government effectively; regulation and surveillance of health care, as in medicare and Medicaid required by the Congress; family and population planning, nutrition—all these things—drug abuse and alcoholism; and international health.

Dr. Carter, you were referring to the successes we have achieved in the international control of smallpox. In large part these recent successes are due to people who have been trained in schools of public health in this country. In achieving what you rightly pointed out will be worldwide control, elimination, of smallpox, we think our international efforts are extremely important and protective of the American people as well as the people in the rest of the world.

Mr. CARTER. May I just say I hope the gentleman's tribe increases and flourishes and that he will continue his fine work.

Mr. ROGERS. Thank you very much.

The House is now in session. Without objection we will recess at this time and reconvene at 2 o'clock.

[Whereupon at 12:05 p.m. the subcommittee was recessed, to reconvene at 2 p.m., of the same day.]

#### AFTER RECESS

[The subcommittee reconvened at 2 p.m., Hon. Paul G. Rogers, chairman, presiding.]

Mr. ROGERS. The Subcommittee on Public Health and Environment will reconvene and we will continue our hearings on the Public and Allied Health Personnel Act of 1973.

Our next witness is Dr. Gary L. Filerman, executive director of the Association of University Programs in Health Care Administration, Washington, D.C.

Doctor, we welcome you and your associates and would be pleased to receive your testimony. Please introduce your associates.

**STATEMENT OF GARY L. FILERMAN, PH. D., EXECUTIVE DIRECTOR, ASSOCIATION OF UNIVERSITY PROGRAMS IN HEALTH CARE ADMINISTRATION; ACCOMPANIED BY JAMES O. HEPNER, PH. D., DIRECTOR OF THE DEPARTMENT OF HEALTH CARE ADMINISTRATION OF THE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE, ST. LOUIS, MO.; AND JOHN M. CHAMPION, PH. D., CHAIRMAN OF THE PROGRAM IN HEALTH AND HOSPITAL ADMINISTRATION AT THE UNIVERSITY OF FLORIDA**

Mr. FILERMAN. Thank you, Mr. Chairman.

For the record I am Gary L. Filerman, executive director of the Association of University Programs in Health Administration, a public service corporation consisting of 49 colleges and universities which provide training for the administration of health services.

My colleagues are Dr. James O. Hepner on my left who is the director of the Department of Health Care Administration of the Washington University School of Medicine in St. Louis and on my right Dr. John M. Champion who is chairman of the Program in Health and Hospital Administration at the University of Florida. The Florida program is a combined effort of the School of Health Related Professions and the College of Management.

By way of illustration, Dr. Hepner brought with him today a supply of the catalogs of his program which I took the liberty of distributing

to the committee because I know there is rather limited familiarity with health care administration and I thought that would be an interesting example for you to see.<sup>1</sup>

Mr. SYMINGTON. Mr. Chairman.

Mr. ROGERS. Mr. Symington.

Mr. SYMINGTON. I wanted to point out to the chair and to the committee how pleased I am to have all of the witnesses with us, of course, and particularly Dr. Hepner who has provided us with this very fine booklet of their health care administration program at Washington University which up until a couple of years ago was in my district. It slipped a little bit east but it is, I would say, one of the major mid-west institutions of learning and in all respects it is held in extremely high regard. So someone who comes from there with the title that Dr. Hepner has is certainly a man of great distinction, and we are grateful to him for taking his time on pretty short notice to be with us today, as well as the other gentlemen who are with him.

Mr. HEPNER. Thank you.

Mr. ROGERS. Thank you.

I might say I had the opportunity when I was attending the University of Florida school—of which we have a fine representative today and I welcome Dr. Champion—to debate the University of Washington in St. Louis and, of course, now I can claim I won because you could not refute that now. So we welcome Florida and St. Louis along with our other witness today.

Mr. HEPNER. Thank you.

Mr. CHAMPION. Thank you very much.

Mr. FILERMAN. Together, with our colleagues in schools of public health, these programs represent the diversity of resources which are now being brought to bear on the training of management for health services at the master degree level.

Among the 49 universities which comprise AUPHA, there are 34 U.S. graduate programs; 29 of these are accredited by a rigorous accreditation process by an agency cosponsored by AUPHA, the American Public Health Association, the American Hospital Association, and the American College of Hospital Administrators. The other programs are working toward accreditation. There are at least 11 additional graduate programs in health administration being organized and we anticipate that AUPHA will include between 60 and 70 institutions within a year. This growth is an important point because it demonstrates the growing emphasis upon management for health services and reflects a positive university response to the programs established under the leadership of this committee.

Mr. Chairman, we want to commend the members of this committee for the action you took in extending the existing programs for the current year to insure the effective use of previous public investments in public health and health administration education and for the work you are doing now to improve these efforts in the future. The proposed legislation is a major step in the establishment of health services administration as a profession and a big step toward expanding the Nation's health services management capacity.

<sup>1</sup> The catalog is entitled "Graduate Program in Health Care Administration," and may be found in the committee's files.

The management problems of vast public medical care and public health programs have only recently begun to be understood as experience has been gained and accessed with programs such as medicare and medicaid. The health care system from a management point of view will rapidly become even more complex, with the consequences for cost and quality of undermanagement or mismanagement growing with it. We are dealing with increasingly large organizations with an expanding array of activities. The programs which this legislation will support are the Nation's only investment in the development of the talent needed to effectively manage these activities. This bill is therefore a critical underpinning of any future expansion of public health and medical care programs, including I might add national health insurance.

The proposed legislation is sound and does represent an advance over the expiring programs. One of the strengths of the bill is its recognition of the integral relationship of education for public health, health administration, and health planning. We support the general structure of the bill which identifies these emphases within a single broad framework. Health and hospital administration programs which go by a variety of titles and grant a variety of degrees, prepare students for a variety of roles in the management of the delivery of health services. This diversity is a major strength and contribution, we believe. If you will consult the tables at the back of the testimony you will note the spectrum of major emphases which students pursue in the AUPHA programs. The table labeled "First Year Students" shows this clearly. Of course, many of the students whose major emphasis is "Hospital Administration" or "Health Administration" pursue careers in the fields listed lower on the page. But this table demonstrates what the project grant authority can do by supporting the innovative development of special interest tracks to meet the needs in fields such as those listed. The support provided in the bill is clearly needed.

We are concerned about the provision in section 791A(6) which suggests that project grant support may be used to develop accreditation in health planning. We strongly support voluntary accreditation for health planning, health administration, and public health, but question the appropriateness of Federal support for accreditation in one area. There is also a serious question of the role of the Federal Government in accreditation generally.

It may be argued that the purpose of accreditation is the measurement of quality, with eligibility for Federal support a byproduct of that process. It may be difficult for an accreditation agency to maintain its independence and objectivity when it has been created primarily to ascertain eligibility for Federal support and/or is itself a recipient of support from the agency which uses its judgment as a basis for determining funding eligibility. We suggest that it may be more appropriate to allow universities which receive institutional support to use a portion of that support to pay for accreditation services.

The institutional grant program established by the bill would potentially put health administration education on a firm base for the first time and assure the long-range commitment of the management services to health services delivery issues. However, the existing language establishes a base of support for schools of public health through

earmarking 75 percent of the appropriation or \$7 million, whichever is greater, for these schools. We believe that the viability of the schools of public health must be assured. There are accredited programs in hospital and health administration in nine of the schools. The schools in total are a vital source of faculty for all of our programs and represent a substantial proportion of the Nation's health services research capacity. Not only health administration but other areas outside of the schools, such as community medicine, are highly dependent upon them.

But the funding mechanism should recognize the need to support the efforts of the other institutions which are playing an increasingly important role in fields which were once covered almost exclusively in the public health schools. These include health administration programs and health planning programs which are based in medicine, public administration, management science, business administration, and other schools. In no case should an inadequate appropriation be allowed to close out support for such schools entirely or be at such a level as to be meaningless, which could easily happen under the present language. That is what could happen at the University of Florida, which has only two full-time faculty members or at Washington University, the two schools which are represented here today. It makes far more sense to have the distribution of such support based upon student enrollment, following the pattern established in other health professions.

It should also be noted that the present language negates a major thrust of the bill which is to provide flexibility to put funds where they are needed in terms of national priorities. We have developed a breakdown of available funds at different appropriation levels which illustrates the problem with the present language. That is the last sheet of the testimony.

It shows that an appropriation of about \$16 million would be required for significant funds to be available for health administration and planning. We recognize that only a total of 80 percent of the funds appropriated is allocated under this scheme in the legislation. But in the last year with an appropriation bill signed into law for HEW the authority for the roughly similar formula grants was \$12 million, section 309(c) with an appropriation of \$5,500,000.

To use a currently popular expression, that would make the proposed language "inoperable." Even if the appropriation were \$7 million, it is conceivable that the 24 to 34 universities which train perhaps the majority of health administrators and planners would receive little or no assured support. Some would go out of business; others would not be created. A substantial portion of the bill's potential contribution to improved public health would be canceled out.

The provision of student support through traineeships is critically important, particularly if we are to achieve our objective of a profession which is culturally and socially representative of our population. The approach to student support, direct awards instead of block grants may introduce a market dimension to student recruitment which will have desirable impact upon the educational establishment. In other words, the student will go where the action is and not where the traineeship is.



Finally, we do strongly urge the committee to provide for the establishment of an advisory committee or council on all aspects of this legislation pertaining to public health, health administration, and health planning. This body should accrue experience over time and help in the establishment of guidelines, the setting of priorities, and the selection of grantees under the project grant provision.

Mr. Chairman, the existing public health training programs are administered by the Bureau of Health Manpower. The association has closely monitored those programs and wishes to record its appreciation for the manner in which they have been managed. The Congress and the public and the universities have been well served by that agency. I say that with full recognition that a competitive grant program entails decisions which are frequently unpopular. There is every indication that all decisions were made fairly. We think that one reason for this excellence is the interaction between the administrators of the program and their advisory council. The proposed legislation is strong in its flexibility and such a council would not impinge upon that flexibility, but would support it. It was a strength of the previous legislation and should be carried over.

There are a few places in the bill where terminology referring to health and hospital administration should be modified for purposes of consistency.

Thank you. We would be happy to answer any questions.

[The attachments referred to follow:]

#### ASSOCIATION OF UNIVERSITY PROGRAMS IN HEALTH ADMINISTRATION

##### *Degrees granted in 1972—by emphasis*

##### United States:

Hospital Administration.....	293
Health Administration.....	296
Hospital and Health Administration.....	163
Administrative Medicine.....	17
Community Health Administration.....	10
Medical Care Administration.....	2
Comprehensive Health Planning.....	47
Health Records/Information Systems.....	2
Long Term Care Administration.....	3
Mental Health Administration.....	2
<b>Total .....</b>	<b>835</b>

##### Canada:

Hospital Administration.....	45
Health Administration.....	14
Nursing Service Administration.....	4
Social Administration.....	1
<b>Total .....</b>	<b>64</b>
<b>Grand total.....</b>	<b>899</b>

## MASTER'S DEGREES GRANTED BY AUPHA MEMBER AND ASSOCIATE MEMBER PROGRAMS

	1972	1971	1970
Member and associate member programs:			
United States.....	835	597	583
Canada.....	64	34	31
Total.....	899	631	614
Member programs:			
United States.....	795	574	564
Canada.....	64	34	31
Total.....	859	608	595
Associate member programs:			
United States.....	40	23	18
Canada.....	0	0	1
Total.....	40	23	19
DEGREES			
Diploma in hospital administration.....	14	11	19
Master of in:			
Hospital administration.....	213	188	205
Business administration.....	127	135	162
Public health.....	165	65	66
Health services administration.....	46	27	26
Public administration.....	23	21	13
Health administration.....	86	38	16
Health planning.....	10	0	0
Master of science in:			
Hospital administration.....	22	35	68
Health administration.....	74	11	11
Hospital and health services administration.....	29	7	5
Health care administration.....	0	42	8
Public health.....	5	9	0
Hygiene.....	3	4	0
Master of arts in:			
Health care administration.....	82	13	0
Hospital and health administration.....	0	25	15
Total.....	899	631	614

	1972	1971	1970
<b>1ST-YEAR STUDENTS</b>			
United States, total.....	1,109	964	810
Major emphasis:			
Hospital administration.....	451		
Health administration.....	318		
Hospital and health administration.....	188		
Administrative medicine.....	26		
Community health administration.....	27		
Medical care administration.....	4		
Comprehensive health planning.....	81		
Health records.....	5		
Mental health administration.....	2		
HMO and clinic administration.....	5		
Long-term care administration.....	2		
Canada, total.....	80	71	70
Hospital administration.....	31		
Health administration.....	38		
Social administration.....	8		
Nursing service administration.....	3		
Total.....	1,189		
<b>2D-YEAR AND ADVANCED STANDING STUDENTS</b>			
United States, total.....	920	812	702
Major emphasis:			
Hospital administration.....	412		
Health administration.....	281		
Hospital and health administration.....	154		
Administrative medicine.....	16		
Comprehensive health planning.....	47		
Health records.....	1		
Mental health administration.....	5		
HMO and clinic administration.....	1		
Long-term care administration.....	2		
Education and research administration.....	1		
Canada, total.....	75	85	83
Hospital administration.....	37		
Health administration.....	30		
Social administration.....	3		
Nursing service administration.....	5		
Total.....	995		
Total enrollment:			
United States.....	2,029	1,776	1,512
Canada.....	155	156	153
Grand total.....	2,184	1,932	1,665

*Sec. 791 A and B*

Appropriation .....	\$20,000,000
A (20 percent).....	4,000,000
B (60 percent).....	12,000,000
75 percent of B.....	9,000,000
Available to Health Administration.....	3,000,000
Appropriation .....	18,000,000
A (20 percent).....	3,600,000
B (60 percent).....	10,800,000
75 percent of B.....	7,950,000
Available to Health Administration.....	950,000
Appropriation .....	16,000,000
A (20 percent).....	3,200,000
B (60 percent).....	9,600,000
75 percent of B.....	7,200,000
Available to Health Administration.....	200,000

## Sec. 791 A and B—Continued

Appropriation .....	15,000,000
A (20 percent) .....	3,000,000
B (60 percent) .....	9,000,000
75 percent of B .....	6,750,000
Available to Health Administration .....	0

Mr. ROGERS. Thank you very much for your statement.

Mr. Symington.

Mr. SYMINGTON. I just want to say, Mr. Chairman, I appreciate very much Dr. Filerman's statement and I think it will help us extremely in the consideration of this bill.

When you refer to section 791 you are worried about Federal participation in accreditation. Is that what troubles you there?

Mr. FILERMAN. That is correct. There is only one precedent to my knowledge for Federal support of the accreditation process and that was for clinical psychology.

Accreditation as a process is undergoing a very thorough review nationally at this time and particularly from the point of view of any distortions that have taken place in the process as a result of the dependency of Federal eligibility upon it and we think it ought to be thought through very carefully.

Mr. SYMINGTON. Well, I think considerable weight should be given to your judgment in that and I am sure it will be.

That is all I have at this time.

Thank you, Mr. Chairman.

Mr. ROGERS. To give us an example, how will Florida be affected if we don't continue this legislation as proposed by the administration?

Mr. CHAMPION. You are asking how would the University of Florida be affected the way it is written. One of the problems as we see it is that the program at the University of Florida is an interdisciplinary program offered jointly by the College of Business and the College of Law, the College of Health Related Professions. The degree is a master of business administration and we do not have a school or college in the university or in the State of Florida for that matter.

Mr. ROGERS. So the moneys for the program is what would affect Florida?

Mr. CHAMPION. Yes.

Mr. ROGERS. Thank you so much. We appreciate your being here, and any suggestions you may have for the committee, we would very much like to have. I think they would be very helpful.

Mr. FILERMAN. Thank you.

Mr. ROGERS. Thank you so much.

The committee will recess for 10 minutes so that Members may answer the call to the floor.

[Brief recess.]

Mr. ROGERS. The subcommittee will come to order, please, and we will continue our hearings on the Public and Allied Health Personnel Act.

The next witness is Dr. Dean Fletcher, University of Utah, Salt Lake City, Utah.

## STATEMENT OF DR. DEAN FLETCHER, IN BEHALF OF HEALTH PLANNING AND EDUCATION ASSOCIATES

Dr. FLETCHER. Thank you, Mr. Chairman, and members of the committee.

I apologize for not having a written text of this testimony, but I will send it to the committee as soon as feasible [see p. 112].

Mr. ROGERS. That is all right.

Dr. FLETCHER. I appreciate the opportunity of testifying concerning H.R. 9341, particularly with regard to the training of allied health personnel.

I am representing a small group of health professionals and educators from the Intermountain West who are concerned about allied health education, and the direction it is currently moving. I wish to commend the committee for its action in developing forward-looking legislation aimed at improving the educational level and lot of the allied health professions. Allied health as an entity, as has already been stated, has been developed only in the past few years, however, health professions and other medicine have been around as long as medicine itself.

With the development of the Federal level of the allied health programs in the country, colleges and universities have seen the need for expanding and developing schools of allied health professions with the specific idea of meeting the shortages in the health care professions.

During this period of time the professions have been proliferating until over 200 such groups now have developed. Most universities gathered into their colleges and schools these programs that were scattered around the campus and off campus and provided an administrative structure to give them status.

Priority was given, however, to expanding and maintaining existing or rather traditional programs within these schools and it has only been very recently that any of the schools have been able to give very much concern to the role of the professional and how they might be better trained.

Little effort has been given up to the present time by many of the schools to proper roles that this health professional should have in the delivery system. A corporation in Virginia called Technomics Corp., has and is conducting an ongoing study for the Navy reducing the number of health professions down to 16. The University of Kentucky and others have conducted studies trying to identify the proper roles of the health professions with respect to the physician practice and how they can better prepare people for this.

Many schools have not had time nor money to deal with this tremendously complex problem. There are some questions even about the flexibility of most universities to change to meet the changing demands. It is much easier for schools to accept proven programs than to develop new ones or to change direction severely.

New programs cost money and that money has been becoming in short supply from Federal sources at least recently. State support for experimental programs has been slow to develop and is really not very likely to do this unless some radical change occurs.

The provisions in the present bill particularly with regard to section 795 appears to allow nonprofit agencies dedicated to education to play a role in the experimental and developmental programs which might more easily be started outside the university or college than inside.

I might give you two or three examples of this. A health care mutualist program which is the development of a generalist-type person who could practice in small community hospitals giving broad coverage or also could serve in rural community doctors' offices to assist in the providing of care for the people in those areas.

Another area that needs to be looked at is statewide or regionally wide coordination of health care programs. This is very difficult to be conducted within the existing system.

Another problem that needs to be looked at seriously is a multientry system for deprived or minority students trying to get into the health care system. There is a protective mechanism in the grant system as outlined by this bill so that there is no fear from this kind of mechanism. Therefore I would urge the committee to provide even greater financial support for the colleges of allied health professions and centers for allied health but in addition to that provide a mechanism that will allow for efforts that can only be generated outside the university through the nonprofit institutions.

Thank you very much.

[The following statement was subsequently received for the record:]

STATEMENT OF DR. DEAN FLETCHER, IN BEHALF OF HEALTH PLANNING AND  
EDUCATION ASSOCIATES

Mr. Chairman and members of the committee, I wish to express my thanks to the committee for allowing me to appear and testify concerning H.R. 9341, particularly as it relates to the revisions of programs of assistance under Title 7 of the Public Health Service for training of allied health personnel.

I represent a small group of health care professionals and educators from the Intermountain West. Our organization is called Health Planning and Education Associates. We are concerned about allied health education and the direction that it is currently moving. I wish to commend the committee for its action in developing a forward looking legislation aimed at improving the education level and lot of the allied health professionals. Allied health as an entity has developed only in the past few years. Separate health professionals other than physicians, however, have been around almost as early as medicine itself, and have evolved with increasing rapidity during the past many years.

With the development of federal support and national organization, colleges and universities saw the need for training health care professionals other than physicians and nurses, and developed colleges and schools of allied health professions with the specific goal of meeting the shortages in the health professions. During this period of time the numbers of professionals and professions have been proliferating until now well over 200, probably closer to 260, professions have developed. Most universities gathered into their colleges and schools all of these programs scattered around campus and provided them an administrative structure to give them some status. Priority, however, was low and was given to maintaining and expanding existing traditional programs within the schools, and only recently has any thought been given concerning the role of the professional and how he might better be trained.

Little effort has been given, to the present time, by many schools to the proper role that the health professions should have in the delivery system. A corporation in Virginia called Technomics is conducting an ongoing study for the navy in an attempt to try to illicit the number of health care professionals that would meet the needs of the navy, and they have cut the number from this wild 260 down to 16.

The University of Kentucky and others have conducted studies identifying the competency level of their allied health professionals, and the State of California

has been studying medical technology with the view of determining the educational objectives needed to provide a minimum amount of training for these people.

Many schools have not had time nor money to deal with the tremendously complex nature of this problem. There has been some question even about the flexibility of the university to be able to change to meet these changing demands. It is much easier for the schools to accept a proven program than to develop a new one or change direction of existing programs. However, new programs cost money, and money has been becoming in shorter and shorter supply. State support for experimental programs has been slow to develop and is not likely to increase appreciably until some radical changes occur.

The provisions in H.R. 9341, Section 795, appear to allow nonprofit agencies dedicated to education to play a role in the experimental and developmental programs which might more easily be started outside the university or college than inside. Under Section 795, no. 2, if paragraph A, line 6 were changed to read "schools, universities, or other educational entities to include educational institutes and nonprofit organizations which provide for allied health personnel education and training, meeting such standards as the secretary may by regulation prescribe" would clarify the position of the institute or private nonprofit foundation's entrance into the experimental field of education for the allied health professions. For example, such studies as the development of the health care technician or technologist concept, which have been dropped by many schools because of the complex problems of licensure of these individuals, could be taken up and studied by an outside organization, and the results of these studies made known to the schools and colleges for their utilization after the definition has been made.

Another one would be that currently it is almost impossible for cooperation between universities and colleges to be brought about from one university or another without creating a threat. By using an external system, a cooperative program using the health care ladder system could be developed and evolved setting up curricula within various institutions allowing the students and practitioners to move both horizontally and vertically within the system. Most universities and colleges are restricted by a series of regulations which insist that students entering the university or college must be highschool graduates of such and such a caliber. Many students are excluded through this mechanism and I would suggest that another study, that could be operated outside the university or college system, is a multi-entry system which helps deprived or minority students to bring themselves up to an entry level or status so that they might well compete in the existing programs of these colleges and schools.

There is already a built-in protection mechanism in the grant system within the legislation so there is no fear of this mechanism. Therefore, I would urge that the committee strive to provide greater financial support for the colleges of allied health, but in addition to provide the mechanism that will allow for individual effort outside the university or college to be generated in a nonprofit educational center.

Thank you.

Mr. ROGERS. Thank you.

We appreciate the ideas you have presented to the committee.

It might be well if you let the committee staff have any specific language.

Dr. FLETCHER. Yes, I will do that.

Mr. ROGERS. That could be helpful.

Dr. FLETCHER. Yes.

Mr. ROGERS. Thank you so much for your presentation.

The committee will recess for 5 minutes.

[Brief recess.]

Mr. ROGERS. The subcommittee will come to order, please.

The next witness is Ms. Linda Tarr, health specialist, American Federation of State, County, and Municipal Employees, AFL-CIO, Washington, D.C.

We welcome you, and we will be pleased to receive your statement. If you like, we will make your statement a part of the record at this point, and you may proceed however you desire.

**STATEMENT OF MS. LINDA Z. TARR, HEALTH SPECIALIST, AMERICAN FEDERATION OF STATE, COUNTY AND MUNICIPAL EMPLOYEES, AFL-CIO**

Ms. TARR. Thank you, Mr. Chairman.

For the record I am Linda Z. Tarr, health specialist for the American Federation of State, County and Municipal Employees, AFL-CIO.

Among the 650,000 members of AFSCME, are 150,000 members who are employees of hospitals, health departments and other health facilities. These 150,000 members are found in 42 States and include a spectrum of health workers—professional, paraprofessional, and nonprofessional. We wish to testify on behalf of these doctors, aides, technicians, therapists, new professionals, nurses and other health workers who are employed in the public or allied health field.

We have particular interest in the needs and ambitions of the 900,000 employed nonprofessionals and paraprofessionals in community, public and allied health. AFSCME has recently completed a study of these workers. The summary of this study, which may be of interest to the committee, is attached [see p. 117]. The full report is available to the subcommittee.

AFSCME supports the basic principles embodied in H.R. 9341, The Allied and Public Health Service Act of 1973—the coordination of health manpower programs; the dedication to concepts of upward mobility; the broadened definitions of public health personnel to include community health workers, and a broadened concept of allied health. We support the concept of a 1-year extension in order to coordinate the expiration date of the act with other health manpower legislation. For too long, health manpower has been seen in small pieces, rather than as an integral whole. While we support the principles of H.R. 9341, we are concerned about the following issues:

- (1) Clear definitions;
- (2) Differentiation between programs in the community/public health area and the allied health area;
- (3) Coordination of education and utilization in the employment market;
- (4) Levels of authorization; and
- (5) Student support.

With regard to the definition of public and community health personnel—activities are included which are performed by a wide variety of health workers prepared at the graduate level, and many workers prepared at the associate degree and baccalaureate levels. While the usefulness of such persons as community health workers, at the AA level, and health educators, at the BA level—and we might add all of those environmental technicians at both levels—is unquestionably great as increased emphasis is placed on preventive medicine and ambulatory care, the education of these workers is not included in the section dealing with community and public health personnel.

According to the bill, institutions eligible for grants must basically be graduate schools which presently prepare none of these workers. The language on eligible entities in section 795(2) should be utilized in this section as well. The category of eligible entities might be strengthened by noting that all grant-receiving entities must coordinate their programs with recognized educational institutions.



While we appreciate the inclusion of other than educational institutions as grant-receiving entities, we feel that perhaps safeguards are necessary so that programs will reflect a continued involvement with educational institutions. The field of allied health has been replete with small programs which were not replicable and did not provide true credit or upward mobility for workers.

Several of the categories included for special grants and contracts in the allied health section are relevant to the emerging problems in community and public health. Of particular importance are coordination and articulation of levels of training; regional coordination; recruitment and retaining of health personnel and projects designed to utilize the skills of such groups as veterans, the culturally deprived and those persons reentering the job market in health.

To both sections 791-A and 795(1) should be added the special category of present hospital/institutional employees who must be retrained for roles in the community. As an example of the type of health care which will require improved manpower at the community level is the decentralization and deinstitutionalization of mental health in Massachusetts. This type of decentralization and deinstitutionalization is happening in many of the States, and, while it is a very forward-looking trend and may result in improvement of care, the trend makes a difference with regard to the need for manpower.

Massachusetts has followed an extensive program to change its approach to mental health from an institutional to a community-oriented outpatient model. The census in institutions for the mentally ill has halved since 1968. By the end of the fiscal year, four hospitals for the mentally ill will close.

To prepare for the closures and to change to a community-based treatment system, AFSCME developed a retraining program in cooperation with the Commonwealth Department of Mental Health and the community college system. Hospital attendants with years of experience in dealing with the mentally ill are receiving 15-week retraining programs which include basic education and high school equivalency; training in community liaison skills; and the on-the-job application of training. Credits earned will fill part of the requirement for an associate degree in community mental health. Many more pilot programs are needed in areas of environmental health, ambulatory care, rehabilitation, mental retardation and others.

AFSCME is strongly supportive of the language in the bill to set up a study under the auspices of the National Academy for Sciences of the entire area of education and utilization of community and allied health personnel. We are willing to assist in this study in any way possible. However, there is another dimension to the problem. At a recent meeting in July 1972, called by the New England Regional Board of Higher Education, a study of associate degree in mental health programs was reported which showed only 40 percent of the graduates of mental health associate degree programs in New England were employed in their field. These figures can be duplicated in other areas.

They result from two problems which must be addressed—first, the development of job specification and employment opportunities for our skilled, allied, and community workers. Civil Service and private employment job descriptions frequently do not reflect the levels and types of training—although the needs for services may be great. For

example, the job categories of physical therapy aide—nonprofessional—and physical therapist—professional—are widely seen. However, a certified physical therapy assistant—a category not widely seen—may have to be employed as an aide or seek employment outside of the field of training.

Second, the fad phenomena exists in the field of allied and community health. Unfortunately, there is a long lag time between the acknowledgement of the need for health workers in a particular area and the first employment of graduates. In addition, there may be a great difference between the service agency conception of, for example, a biomedical engineering technician and the actual curricula which prepares these workers. Once a program becomes operative—the trend is to stay operative and draw more students, even though the needs in the service agencies may have changed.

There is a tremendous need for interdisciplinary advanced regional planning to coordinate utilization and education. Community, public and allied health manpower policy advisory boards should be created at the level of regional comprehensive health planning agencies, B agencies, to include educational institutions, health agencies, professional organizations, employees' representatives, and consumers.

These policy advisory boards could be expanded to include all health professions when new legislation is passed in other areas. Through this approach, the annual reports and statistics collected could and should reflect matters of utilization as well as preparation of health personnel. Such health policy advisory committees could also make recommendations on greatest regional need which might be a better guide for grant determination than the national need criteria presently included in the bill.

AFSCME is also concerned about the levels of authorization in the bill in the areas of community and public health personnel and the area of full utilization of talent. While understanding the need for tight budgets, this organization considers it essential that the authorizations for project grants under section 791A be increased sufficiently to allow for grants at the associate degree and baccalaureate levels. As a nation, we need to encourage the preparation ambulatory, community-based health care.

We must retrain present personnel and prepare new personnel to meet these needs. We suggest an authorization of \$15 million—half the authorization level for allied health in 1973.

The authorization level of \$1 million in section 797, "utilization of educational talent," is \$250,000 less than the 1973 level. This amount, as a special grant section should reflect expanded rather than contracted financial commitment. This union would like to see the principles of identification of potential health personnel, assistance, counseling, and secondary school education, all of which are included in this section 797, to be a mandated part of all public, community and allied health grant projects below the graduate school level. This would greatly increase the potential effectiveness of the career ladder and equivalency/proficiency program.

AFSCME sees only one major problem with H.R. 9341—money for students. It is our understanding of H.R. 7274, the Public Health Act of 1973, that allied health full utilization grants, scholarship grants, work study and loan programs would be found in sections 760 through 763 in the new act. Since full utilization grants are discussed in H.R.

9341 in section 797, we feel that emphasis should be given to the remaining matters of work-study, scholarships, and loans, to avoid missing these important matters. For the implementation of these principles of upward mobility, increased opportunities for minorities and the culturally deprived—intent and rhetoric are not enough. It is virtually impossible for the employed nonprofessionals and paraprofessionals in health to increase their skills without financial support.

In order to help resolve this crisis by improving the chances of experienced health workers to move out of dead-end jobs and into necessary health careers, AFSCME has designed and implemented career development programs. Thousands of nonprofessional health workers have obtained new skills, high school diplomas and college credits to move upward into the nursing and allied health professions.

The therapy aide who makes the minimum wage of \$4,800 cannot ever become an occupational therapist without a scholarship. The 45-year-old dental aide will never get credit for his experience in an associate degree dental health technician program unless more Federal grants are available. The dry budget statements of the administration refer to alternative resources—for the nurses' aides, the technicians, the nurse, the blacks, the Chicanos, the women who make up the health work force of this country, there are no alternative resources.

AFSCME supports scholarships based on need, low-interest subsidized loan programs with accelerated loan forgiveness for service in areas of insufficient health manpower, and work-study programs. We feel that these programs should be available throughout the health field—for undergraduate, community and allied health personnel as well as nursing, medicine, dentistry, et cetera. AFSCME hopes that the subcommittee will address itself to this problem which has a tremendous effect on hospital workers.

In summary, Mr. Chairman, the American Federation of State, County, and Municipal Employees on behalf of its 150,000 members in the field of health and the 900,000 nonprofessional and paraprofessional health workers in community, public, and allied health supports the efforts of this subcommittee to better coordinate health manpower programs; to dedicate itself to the concept of upward mobility, to broaden the definitions of public health personnel to include community health workers and to broaden the concepts of allied health.

Thank you, Mr. Chairman.

[Testimony resumes on p. 122.]

[The attachment referred to follows:]

**AMERICAN FEDERATION OF STATE, COUNTY, AND MUNICIPAL EMPLOYEES, NON-PROFESSIONALS AND PARA-PROFESSIONALS IN ALLIED HEALTH MANPOWER, JULY 24, 1973**

**INTRODUCTION**

In looking at the field of Allied Health Manpower the American Federation of State, County, and Municipal Employees found that the major occupational breakdowns are as follows:

Unit Administration  
Dietary Technicians  
Medical Records Department  
Medical Assistant  
Laboratory  
Radiological Services  
EEG Technician  
EKG Technician  
Biomedical Equipment Technician

Orthotics and Prosthetics  
Nursing Services  
Therapy Services  
Emergency Services  
Environmental Health Services  
Social Services  
Physician's Assistants  
Dental Services  
Pharmacy Services

Our definition of Allied Health for purposes of this research was non-nursing, non-physician personnel. In all cases the emphasis was at the para-professional level. Sources of information for this study are records of the Bureau of Health Manpower, Health Services and Mental Health Administration, Department of Health, Education and Welfare, and documents noted in the Bibliography.

**Unit Administration.**—Definition—the coordination of non-medical tasks in a patient care unit of a hospital or extended care facility. (1) Unit Manager: Job Description—supervises and coordinates administrative management functions for one or more patient care units. Duties include keeping inventories, scheduling and training employees, inspecting ward and equipment, and serving as liaison between unit and other departments. Education 1 year college. Numbers Employed—not available. Credentialing—none. (2) Unit Clerk: Job Description—performs clerical work in the maintenance of patients records including requisitioning lab tests and pharmacy services, recording and/or graphing exam and test results, paging doctors, and sending messages to other departments. Education—high school degree. Numbers Employed—58,000<sup>2</sup> (may include all unit management personnel). Credentialing—none.

**Dietary Technicians.**—(1) Food Production Supervisor: Job Description—plans or aids in planning menus; estimates amounts and types of food needed; supervises cooking personnel; inspects store items; and tests cooked food. Education—high school diploma. Number Employed—not available. Credentialing—none. (2) Food Services Supervisor: Job Description—purchases food; supervises food service workers; inspects filled trays; and ensures sanitation. Education—approved American Dietary Association course; some programs in junior and senior colleges. Numbers Employed—7,000<sup>4</sup>. Credentialing—ADA approved program.

**Medical Records Technician.**—(1) Medical Records Technician: Job Description—codes and enters medical information into patient's record; when authorized abstracts information from records for legal firms and insurance companies; and gathers statistics and prepares reports. Education—high school diploma plus 9 month AMA/American Medical Record Association approved program. Numbers Employed—8,000<sup>4</sup>, 43,000<sup>6</sup>. Credentialing—registration exam given by the American Medical Record Association to graduates of AMA-approved programs. (2) Medical Records Clerk: Job Description—translates information into code and enters into medical record; checks records for completeness; types reports; and gathers statistics. Education—on-the-job training. Numbers Employed—not available. Credentialing—none.

**Medical Assistant.**—Job Description—works in doctor's office, hospital or clinic, performing administrative duties and serving as a technical assistant. Specific tasks include: greeting patients; making appointments; handling correspondence; filing and bookkeeping duties; arranging for lab, X-ray procedures, hospital admissions and scheduling surgery, also prepares patients for exam and treatment; takes temperatures, blood pressures; measures height and weight; sterilizes instruments; assists doctor during exam or treatment; and may perform routine lab and X-ray procedures. Education—one or two years past high school graduation in technical institute, junior or community college. Numbers Employed—200,000–300,000<sup>6</sup>. Credentialing—certification exam given by American Association of Medical Assistants.

**Laboratory.**—(1) Histologic Technician: Job Description—processes sections of body tissue for examination by a pathologist. Processing includes: fixation; dehydration; embedding; sectioning; decalcification and microincineration; mounting; and staining. Education—high school diploma plus 1 year program. Numbers Employed—4,300<sup>6</sup>. Credentialing—can register with the American Society of Clinical Pathologists. (2) Certified Laboratory Assistant: Job Description—performs routine hematology, serology, blood banking, urinalysis, etc. procedures under supervision of a physician or medical technologists. Education—special 1 year training courses for assistants in hospitals, medical centers, and community colleges. Numbers Employed—4,200<sup>6</sup>. Credentialing—certification exam given by the Board of Registry of the American Society of Clinical Pathologists. (3) Medical Laboratory Technician: Job Description—performs clinical laboratory tests under appropriate supervision for the purpose of developing data used to determine the presence and cause of disease. Education—AA degree. Numbers Employed—67,000<sup>6</sup>. Credentialing—certifying exam given by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

**Radiological Services.**—(1) Radiologic Technologist: Job Description—prepares patients and operates X-ray equipment in disease and injury diagnosis under supervision of a physician. Education—2 year certificate or AA degree programs. Numbers Employed—75,000–100,000<sup>6</sup> including Radiation Therapy Technologists and Nuclear Medicine Technicians. Registration by the American Registry of Radiologic Technologists. Credentialing—registration by the American Registry of Radiologic Technologists. Licensure required in California, New Jersey, New York, and Puerto Rico. (2) Radiation Therapy Technologists: Job Description—assists radiologist in disease treatment by giving prescribed doses of X-ray and other forms of ionizing radiation. Maintains equipment and keeps patients' records. Education—2 year AA degree programs. Numbers Employed—75,000–100,000<sup>6</sup> including Radiologic Technologists and Nuclear Medicine Technicians. (3) Nuclear Medicine Technicians: Definition—the scientific and clinical discipline concerned with diagnostic, therapeutic (exclusive of sealed radiation sources) and investigative use of radionuclides. Job Description—aids in positioning patients; abstracts data from patient records; makes dose calculations for in VIVO studies; assists physician in operating scanning devices using isotopes; and responsible for disposal of radioactive waste, safe storage of radioactive materials, and inventory of radiopharmaceuticals. Education—AA degree. Numbers Employed—75,000–100,000<sup>6</sup> including Radiologic Technologists and Radiation Therapy Technologists. Credentialing—certification by either the American Registry of Radiologic Technologists or The Registry of Medical Technologists of the American Society of Clinical Pathologists.

**Electroencephalographic Technician.**—(EEG) Job Description—attaches electrodes to the patient's head for graphing of the brains electrical currents; maintains machine; and may schedule appointments and keep record of services. Education—high school diploma plus 3–6 months on-the-job training. Numbers Employed—3,300–3,500<sup>6</sup>. Credentialing—certified by the American Board of Electroencephalographic technologists.

**Electrocardiograph Technician.**—(EKG) Job Description—attaches electrodes to different parts of the body, and moves electrodes over the patient's chest; exercises patient before test if required; maintains machine; and may give tests or make photocardioagrams. Education—high school diploma plus 3–6 months on-the-job training. Numbers Employed—9,500<sup>6</sup>. Credentialing—none.

**Biomedical Equipment Technician.**—Job Description—responsible for maintenance and emergency repair of medical equipment. Education—high school diploma. There are AA degree programs. Numbers Employed—7,200.<sup>6</sup> Credentialing—certification by Board of Examiners of the Association for Advancement of Medical Instrumentation.

**Orthotics and Prosthetics.**—(1) Prosthetist and/or Orthotist: Job Description—on the basis of a doctor's prescription, the prosthetists designs and fits artificial limbs. The orthotists designs and fits orthopedic braces. Education—4 years on-the-job training. After 1975 AA degree necessary for certification. Numbers Employed—3,600.<sup>6</sup> Credentialing—certification by the American Board for Certification in Orthotics and Prosthetics. (2) Orthotic-Prosthetic Assistant: Job Description—fabricates and fits devices, under supervision of the orthotists and/or prosthetists. Education—high school diploma plus 3 years on-the-job training. Numbers Employed—not available. Credentialing—certification by the American Board for Certification in Orthotics and Prosthetics. (3) Orthotic-Prosthetic Technician: Job Description—fabricates components and devices under supervision of the orthotist/prosthetist or an assistant. Education—tenth grade education plus 2 years on-the-job training. Numbers Employed—not available. Credentialing—certification by the American Board for Certification in Orthotics and Prosthetics.

**Nursing Services.**—(1) Home Health Aide: Job Description—assists patients living at home by general housekeeping, running of errands, feeding; clothing, exercising and medicating patients. Education—no formal requirements. Numbers Employed—20,000–25,000.<sup>6</sup> Credentialing—some states conduct standardized certificate programs. (2) Surgical Technician: Job Description—under nursing supervision, assists surgeons and anesthesiologists. Duties include: preparing patient for surgery, transporting patient to and from surgery, preparing specimens for testing, and helping clean operating room. Education—usually 1 year at technical institute or community college. Numbers Employed—2,500.<sup>6</sup> Credentialing—certification by The Association of Operating Room Technicians. (3) OB/GYN Technician: Job Description—assists in labor room, re-

covery room, nursery, and gynecological area, in addition to helping in the operating room. Education—standards not set, one program requires high school diploma plus 1 year. Numbers Employed—not available. Credentialing—none.

**Therapy Services.**—(1) Occupational Therapy Assistant: Definition—Occupational therapy is concerned with alleviating an individuals' physical or emotional problems, modifying functional ability and encouraging healthy adaptations as measured by the skills of daily living, play, recreation and work. Job Description—performs standard evaluation tests and procedures; teaches or assist patient in exercise and activities; simple splints and adaptive equipment; and orders supplies. Education—high school diploma. Numbers Employed—5,500–6,500.<sup>9</sup> Credentialing—certification offered by the American Occupational Therapy Association. Licensure required in Puerto Rico. (2) Physical Therapy Assistant: Job Description—assists physical therapist in working with patients who are born handicapped or who are disabled by illness or accident in order to restore physical functions and/or prevent further disability. Duties include: administering tests, preparing patient for treatment, helping patient to perform specified exercises, and helping fit orthotic and prosthetic devices. Education—until recently high school diploma, now AA degree usually a requirement. Numbers Employed—9,000.<sup>9</sup> Credentialing—licensure in 10 states: Alabama, Arizona, Florida, Indiana, Kentucky, North Carolina, Oklahoma, Oregon, Texas, and Virginia. (3) Inhalation (Respiratory) Therapist: Job Description—operates machines in order to assist or control breathing of patients under physicians supervision; maintains equipment and keeps inventory of supplies. Education—trends toward high school diploma plus AA degree. Numbers Employed—11,000–12,000.<sup>9</sup> Credentialing—registration by American Registry of Inhalation Therapists of graduates of AMA-Approved Program, with 1 year's supervision. Certification exam by the American Association for Inhalation Therapists.

**Emergency Services.**—(1) Emergency Medical Technician-Ambulance: Job Description—gives lifesaving and other treatment at scene of emergencies; utilizes methods to prevent further injury during preparation for transportation; continually observes the patient; may assist in caring for the patient; and reports details of emergency to medical personnel and legal authorities. Education—traditionally on-the-job training; movement toward specialized training. Numbers Employed—5,600.<sup>9</sup> Credentialing—exam by Registry of Emergency Medical Technicians—Ambulance. (2) Emergency Medical Technician: Job Description—same duties as Emergency Medical Technician—Ambulance, but done in any department of medical facility including emergency room. Education—information not available. Numbers Employed—not available. Credentialing—none.

**Environmental Health Services.**—(1) Environmental Technician: Job Description—assists in operation and maintenance of pollution control facilities, environmental monitoring devices, and scientific laboratory apparatus; assists in routine inspection of industrial and commercial sites to determine compliance with laws and regulations; and assists in enforcement of public health standards. Education—Associate Degree in Environmental Sciences. Numbers Employed—69,000.<sup>9</sup> Credentialing—standards adopted by National Accreditation Council for Environmental Health Curricula. Sponsored by National Environmental Health Association.

**Social Services.**—(1) Institutional Mental Health Worker: Definition—this type of mental health worker is found primarily in an institutional setting dealing with people who are recognized to be mentally unstable or handicapped. Job Description—duties may include: performing preadmission interviews with patient and family, administering structured psychological tests, conducting or assisting in individual and group therapy sessions, serving in educational institutions. Education—ranges from hospital training programs to associate degree programs. Numbers Employed—not available. Credentialing—licensing, if job title is Psychiatric Aide in Arkansas, California, Colorado, and Michigan. (2) Community Health Workers: Definition—generalists, who provide a wide variety of services to individuals and the community as a whole in areas of health education, preventative care, and rehabilitation. Job Description—duties may include out-reach work, community action, interviewing, therapy and counseling, and rehabilitation. Numbers Employed—not available. Credentialing—if called Psychiatric Aide, Arkansas, California, Colorado, and Michigan require licensing.

**Physician's Assistants.**—Definition—there are three (3) types of Physician's Assistants at different levels of sophistication. The first can integrate and inter-



pret findings on the basis of general medical knowledge and can exercise a degree of independent judgment. The second possesses exceptional skill in one clinical specialty. The third can perform a variety of tasks over the whole range of medical care under a physician's supervision, but it not capable of integrating and interpreting findings. Numbers Employed—585 (AMA survey, 461<sup>6</sup>). Credentialing—registration with American Registry of Physician's Associates, Inc. Legislation—in Alabama, Arizona, Arkansas, Colorado, Connecticut, Delaware, Florida, Kansas, North Carolina, Oklahoma and Utah Physician's Assistants are covered by the Medical Practice Acts. In Alabama, California, Florida, Iowa, New Hampshire, New York, Oregon, Washington and West Virginia (pending in Illinois, Indiana, Maryland, Michigan, Minnesota, Nebraska, Ohio, Pennsylvania, Tennessee and Wisconsin), the State Board of Medical Examiners or similar agencies approve training programs and authorize doctors use of no more than two (2) graduates of these programs; Certification—the AMA is working for national certification. The following are examples of Physician's Assistants: (1) Assistant to the Primary Care Physician: Job Description—under the physician's supervision, the assistant performs diagnostic and therapeutic tasks including: taking and recording detailed history, performing appropriate physical exam, and routine lab tests, giving simple treatment, assisting physician in hospital, assisting in continued care of patients. Education—program length may vary, usually 2 year AA degree required, but past experience and education taken into consideration. (2) OB/GYN Aide: Job Description—performs examinations and reports findings to a physician. Education—a 26-week training program. (3) Surgical Assistant: Job Description—takes admit history and gives physical; assists at operations; handles minor problems in the emergency room; makes rounds; and orders minor medications. Education—Duke University Program—9 months general education then notations in general surgery or surgical specialty, Alabama University—2 year program. (4) Orthopedic Physician's Assistant: Job Description—under supervision of orthopedic surgeon: manages equipment and supplies, serves as an operating room technician, applies and removes plaster casts, applies prosthetic devices, and instructs and assist patient in crutch walking. Education—2 year college or university programs. (5) Urological Assistant: Job Description—cares for urological instruments; assists in diagnostic procedures; assist in surgery duties; and changes urethral and suprapubic catheters. Education—V.A. Hospital has 1 year training program. (6) Medex: Job Description—works with rural physicians in providing patient care. Education—3 months plus 1 year internship.

**Dental Services.**—(1) Dental Hygienist: Job Description—under direction of dentist: performs prophylaxes, exposes and processes X-rays, applies fluoride solution to teeth, instructs patients in care of teeth; in schools examines children to determine dental needs, and gives dental health talks in classrooms. Education—at least AA degree. Numbers Employed—17,000.<sup>6</sup> Credentialing—license required to practice in all states and D. C. (2) Dental Assistant: Job Description—assists dentist at chairside; exposes and process X-rays; sterilizes instruments; assist with lab work; and perform general office duties. Education—1 year certificate and 2 year AA degree programs. Numbers Employed—114,000.<sup>6</sup> Credentialing—certification exam for graduates of accredited programs given by American Dental Association. (3) Dental Laboratory Technician: Job Description—makes dentures, crowns, bridges and other appliances. Education—most on-the-job training, some AA degree programs. Numbers Employed—31,000.<sup>6</sup> Credentialing—state registration required in South Carolina, certification offered by the National Board for Certification in Dental Laboratory Technology.

**Pharmacy Services.**—(1) Subprofessional Pharmacy Worker: Job Description—duties vary from hospital to hospital, but may include: preparing drug purchase order, checking incoming supplies, storing and inventorying, and supplying drugs, reconstituting prefabricated medication, performing bulk compounding, preparing and labeling multi-doses and unit-doses, delivering medications to nursing stations, etc. Education—until recently on-the-job training. Now formal hospital training programs and associate degree and certificate programs. Numbers Employed—10,000.<sup>6</sup> Credentialing—none.

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Mr. ROGERS. Thank you so much, Ms. Tarr, for presenting these views and these suggestions for the committee's consideration. You might like to submit some additional language for the staff to consider.

Ms. TARR. I would be happy to, Mr. Chairman.

Mr. ROGERS. Thank you for being here.

Ms. TARR. Thank you.

Mr. ROGERS. Our last witnesses will be Mr. Fred J. Struve, Jr., director of Government Relations, American Society for Medical Technology, Washington, D.C., and Miss Nellie May Bering, professor and chairman, Department of Medical Technology, College of Allied Health Professions, Temple University in Philadelphia.

We welcome you and salute your patience. We will be pleased to receive your testimony which the committee will consider with care. Your statements will be made a part of the record at this point without objection and you may proceed however you desire.

**STATEMENTS OF FRED J. STRUVE, JR., DIRECTOR OF GOVERNMENTAL RELATIONS, AMERICAN SOCIETY FOR MEDICAL TECHNOLOGY AND NELLIE MAY BERING, PROFESSOR AND CHAIRMAN, DEPARTMENT OF MEDICAL TECHNOLOGY, COLLEGE OF ALLIED HEALTH PROFESSIONS, TEMPLE UNIVERSITY, PHILADELPHIA, PA., REPRESENTING ASMT**

Mr. STRUVE. Thank you, Mr. Chairman.

I am Fred Struve, director of the Washington Division of the American Society for Medical Technology. Our main office is located in Houston, Texas. Accompanying me today is Miss Nellie May Bering, professor and chairman, Department of Medical Technology, College of Allied Health Professions, Temple University, Philadelphia, Pa. Miss Bering is also a past president of the American Society for Technology.

The American Society for Medical Technology is a national, professional organization composed of approximately 18,000 members engaged in the supervision and performance of clinical laboratory tests. Included in the membership are supervisors with graduate degrees, educators, technologists with baccalaureate degrees, and technicians with education ranging from 2 years of college to on-the-job training.



Our organization believes it has major responsibilities for increasing technical knowledge, providing means for members to evaluate and improve their performance, and education of students entering the various levels of clinical laboratory practice. The ultimate goal of our society is the provision of the best possible care to the patient at economically sound levels. Mr. Chairman, we are most grateful for your kind attention and for the opportunity to appear before you today. At this time Miss Bering will present our views on subpart 2 of the Public and Allied Health Personnel Act of 1973. At the conclusion of our statement we will both be pleased to answer any questions.

Mr. ROGERS. Thank you, Mr. Struve.

Miss Bering.

Miss BERING. Mr. Chairman and members of the committee. We wish to commend you and the committee for introducing this legislation. Upon reviewing H.R. 9341 we chose three sections on which to comment.

- (1) Proficiency and equivalency testing.
- (2) Advanced traineeships.
- (3) The need for a centralized administrative office.

We acknowledge the need to implement proficiency and equivalency mechanisms which recognize knowledges and skills gained through nontraditional routes. We are pleased to note that recognition and compliance studies will be supported by this bill. However we do need to insure that only those examinations and techniques which have been proven to be educationally sound and professionally acceptable will be utilized. Our reasons for this statement calling for valid testing tools are explained in the position paper which is attached to this testimony [see p. 124]). We further recommend that this section of the bill be clarified as to its intent and scope.

With regard to the section of Advanced Traineeships, we wish to bring to your attention the results of a project funded under the Health Training Improvement Act of 1970. Our organization received two small grants to conduct management training programs for medical technologists in administration. The quality and the success of these partially funded institutes has allowed us to go one step further and establish a program with advance credit.

The curriculum is compatible with the university without walls philosophy. The heart of this program is the institute in combination with independent study. We have collaborated with Central Michigan University in developing a Masters of Art Degree in management and supervision. For the first time the possibility to earn graduate credit is available to professionals throughout the Nation who, for various and sundry reasons, cannot go to academic centers for advance study.

This program concept is available to other allied health professions and in fact the institutions are open to other health professionals. The rate of development of such programs will be proportional to the existence of continuing legislation to support such activities.

In addition to supporting the new nontraditional concepts for advanced education there is also need to provide support for the traditional routes. I can cite an example supporting this need from the institution with which I am associated. This year, out of 25 applicants, only one had the financial resources which would allow him

to leave his administrative position and enter our full-time program. Grant support was lacking for all applicants due to cessation of Federal funding for new students. The American Society for Medical Technology is concerned that without funds for the student's tuition and stipend there will be a sharp decrease in allied health personnel returning to graduate school. This will contribute to a continued undersupply of much needed allied health professionals in health care facilities and in educational programs situated in vocational technical schools, hospitals, and 2-year and 4-year colleges and universities.

On the third point, we note the omission is this legislation of a central agency to administer this act other than the general reference to the Secretary. This concern is magnified by recent shifts to the HEW regional offices of activities that previously have been centered in the Division of Allied Health Manpower. In our opinion, regionalization will limit or eliminate participation by allied health professions. In addition, it will fragment programs and result in less than optimal utilization of available funds. We recommend that the Division of Allied Health Manpower be firmly established as the administering agency.

In conclusion, we are of the opinion that this legislation represents a framework which can be expanded to include the statements made in this testimony and in the testimony of the representatives from the Association of Schools of the Allied Health Professions.

On behalf of the American Society for Medical Technology it has been our privilege to present this testimony today. We are available to answer questions and expand on our ideas today or at any time in the future.

Thank you, Mr. Chairman.

[The attachment referred to follows:]

#### ASMT POSITION PAPER EQUIVALENCY AND PROFICIENCY

Equivalency and proficiency examinations have been proposed to measure competency of personnel in the medical laboratory. Both tests have received increasing attention in the last few years. Lack of nationally accepted definitions has created a tremendous amount of confusion. The purpose of this statement is to present the definition of equivalency and proficiency acceptable to the American Society of Medical Technologists and to elaborate on the position of this Society regarding the most effective use of these two measurement tools.

Competency to practice medical technology is currently based on passing a certification examination following completion of a prescribed course of study. Collaboration between the education system (academic credit) and the profession (certification examination) is used to establish minimal personnel standards to ensure quality patient services. Academic credit is conferred upon evidence of adequate learning (cognitive, attitudinal and psychomotor skills). Because of variation in standards in educational institutions, certification of the individual is used to validate academic credit. These two mechanisms, therefore, have developed as the current measurement of competency.

It is now recognized that learning occurs outside the academic environment. The need to measure this learning has precipitated the development of equivalency and proficiency testing.

Written equivalency examinations have been proposed for comparing learning outside academia to learning within colleges and universities. Written proficiency examinations are also being developed which are supposed to test job skill so as to establish levels at which experienced, but not necessarily certified, practitioners can be hired. This Society has participated in the development of these equivalency examinations. Support of the proficiency examination has not been given primarily for the reasons stated in the following paragraphs. Secondly, we feel we must withhold support until the validity of the norming technique has

been determined. To clarify the current confusion, we will define equivalency and proficiency and indicate what we believe to be the limitations of the written examinations. We will also indicate how the tests can partially fulfill the end for which they have been designed.

Equivalency testing refers to examinations used to equate non-formal learning with learning achieved in academic courses. Proficiency testing refers to the assessment of an individual's competency to perform at a certain job level (ie) the knowledge and *skills* required to produce results which meet predetermined criteria for accuracy and precision.

For both academic credit and job performance, knowledge is *one* necessary component and it is this component which can be measured with a written test. "Equivalency" and "proficiency" tests developed to date are in the "paper and pencil" format and therefore, should be useful in this regard.

In order to grant total equivalence for academic credit, however, attitudinal and psychomotor skills must be measured, job performance also requires adequate psychomotor skill. Because of the nature of these components, the written examination in this instance is not an appropriate measuring instrument.

The American Society of Medical Technologists believes that written examinations can and should be used to measure knowledge however it may have been acquired. We believe further, that tests in other formats should be developed to measure those components (attitudinal and psychomotor skills) which are necessary to prove total equivalence in terms of both academic credit and job performance.

Speaking for a broadly based membership representing all areas of practice in medical technology, ASMT accepts its responsibility to work with other appropriate organizations and agencies to produce the type of tools which we believe will most effectively measure the quality of laboratory personnel serving the patient.

Mr. ROGERS. Thank you so much. This is most helpful. Here again, if you could give us some specifics in the wording for the committee to consider when we go into executive session, that would be helpful.

Mr. STRUVE. We would be pleased to do so.

Mr. ROGERS. Dr. Carter.

Mr. CARTER. Thank you, Mr. Chairman.

I note you have management training programs for technologists in administration. Of what do they consist?

Miss BERING. These are medical technologists who have left the supervisory position in the laboratory and have returned for an advanced degree at the master of science level which will include the clinical sciences and administration courses at the university. These are people that are going back into the hospital laboratories or into group practice areas and will be a "business manager," if you will, for a large institution. They may get involved in computer sciences also.

Mr. CARTER. For a hospital or for a laboratory?

Miss BERING. For a laboratory in a hospital or for a group practice laboratory.

Mr. CARTER. Yes, ma'am. Then they will be engaged in management of that particular laboratory wherever it might be.

Miss BERING. Right.

Mr. CARTER. We have some interesting developments in laboratory science at the present time. I understand that we can take a sample of blood and put it into one of our rather large machines and get how many readouts from that of different types?

I take it you are a medical technologist, is that correct?

Miss BERING. Yes.

Well, the one instrument we think of the 12-60, 12 readouts in a 60-second period of time.

Mr. STRUVE. Seventeen on another instrument.

Miss BERING. Yes.

Mr. STRUVE. In greater numbers than that.

Mr. CARTER. Yes, I understand even greater numbers. Are you familiar with leukophoresis?

Miss BERING. A little.

Mr. CARTER. That is quite an interesting mechanism by which the cells and components of the blood are separated.

Miss BERING. Yes.

Mr. CARTER. It is a relatively new field, I understand it is done in only one place in the country at the present time.

Miss BERING. Yes.

Mr. CARTER. Thank you, Mr. Chairman.

Mr. ROGERS. Thank you. We are grateful for your statements and for your patience with the committee.

Mr. STRUVE. Thank you.

Miss BERING. Thank you.

Mr. ROGERS. We are very grateful to you.

This concludes the hearings.

[The following statements and letters were received for the record :]

**STATEMENT OF THE AMERICAN DENTAL ASSOCIATION, THE AMERICAN DENTAL HYGIENISTS' ASSOCIATION, AND THE AMERICAN ASSOCIATION OF DENTAL SCHOOLS**

This statement is submitted on behalf of the American Dental Association, the American Dental Hygienists' Association and the American Association of Dental Schools. We welcome this opportunity to present our views on H.R. 9341, a bill to provide support for the training of public and allied health personnel.

Before addressing the substantive provisions of the bill, we would like to make an observation and a recommendation. The measure authorizes a single year of support for public and allied health training. At the time this legislation was introduced, the Chairman of the Subcommittee indicated that a one-year authority was proposed in order to coincide with the expiration of the Health Manpower Training Act. The recent enactment of P.L. 93-45, however, has already provided a one-year extension through June 30, 1974 for these two programs, thus ensuring that a duplication and overlap of authorities will not occur.

In the event Congress is able to accelerate the legislative process for H.R. 9341, including Senate action and a supplemental appropriation, it would still not appear that these programs could become operational before the end of the current calendar year. By that time we are hopeful that Congress will have begun a comprehensive review of all of the health manpower legislation scheduled to expire on June 30, 1974. In the likely event these considerations result in significant changes for our future health manpower authorities, the public and allied health programs will have undergone three major modifications within a period of three years. Needless to say, educational institutions will find it difficult if not impossible to effectively plan and budget in the face of such abrupt changes in the groundrules for Federal assistance. In view of this, we urge the Subcommittee to consider a minimum authority of three years for any public and allied health measure that is passed.

Pending a thorough evaluation of the proposals contained in H.R. 9341, we would like to make the following general comments:

**PUBLIC HEALTH**

The American Dental Association endorses the need for legislation designed to provide Federal support for public health training. Graduates of public health programs have assumed responsibilities in such varied and important areas as: the U.S. Public Health Service, State Health Departments, Colleges and Universities, hospital administration, Comprehensive Health Planning, and numerous professional and non-profit health organizations. Because public health is a dynamic profession, its members reflect the diversity of skills and backgrounds necessary to deal effectively with emerging health problems. In view of this, we rec-

commend that the term "health care" be used in place of the term "medical care" where it appears in Section 790 of the bill. Our Association supports in principle, the authorization of programs providing Project Grants and Contracts, Institutional Grants and Traineeships contained in this measure.

#### ALLIED HEALTH

A principal obstacle to the success of efforts to provide meaningful support for allied health personnel is the rapid growth in the number and type of training programs. At the present time, there are over 3200 allied health training programs in junior and senior colleges. Total enrollment for accredited dental auxiliary programs alone approaches 19,000. Existing allied health legislation has been able to assist only a fraction of these institutions. In the absence of complete and reliable data on national needs, geographic distribution and patterns of utilization, we are confronted with two alternatives: authorize discriminate funding at the exclusion of some programs or, define eligibility requirements in such a manner as to include all disciplines and institutions. Our experience under the "training center" requirements of the existing law has been the exclusion of over one third of the nation's accredited dental hygiene programs from all sections of the legislation except Special Project Grants. On the other hand, the number of potential applicants and the realities of future funding may well preclude meaningful support under a broader definition of eligibility.

The dental profession, however, is somewhat unique in the health field by virtue of the fact that there are just three recognized allied health specialties—dental hygiene, dental assisting and dental laboratory technology. As long established members of the dental health team, each area has a well-defined role in the delivery of oral health care. This tradition is reflected in the fact that 1973 marks the 50th anniversary of the American Dental Hygienists' Association. Over the years, this interrelationship has enabled our Associations to compile accurate data on national dental auxiliary requirements. Congress recognized this unique situation with the Senate passage in 1971 of the Children's Dental Health Act, authorizing separate assistance for the training of dental auxiliary personnel. Because the House did not act on the measure, the Children's Dental Health Act has been reintroduced in the 93rd Congress. We believe this legislation provides a more realistic approach for the support of dental auxiliary training and urge the Subcommittee to consider the bill, H.R. 2728, during your deliberations.

In the event the Children's Dental Health Act is not enacted during this session of Congress, dental auxiliary education would require assistance under the broader provisions of some form of Allied Health Legislation. Such support, in our opinion, should include at a minimum:

Institutional Grants that ensure a continuing and stable source of Federal funds to meet the basic operation costs of allied health training programs;

Special Project Grants and Contracts to assist institutions and organizations representing the allied health professions in the development and operation of innovative projects in curriculum improvement, regional coordination, supply and distribution, minority recruitment and retention, career ladder and experimental teaching programs;

Student aid through programs of scholarships and direct and guaranteed loans, and

Traineeships for the preparation of teachers, administrators and supervisory personnel.

Eligibility requirements for training programs should be limited to the support of those allied health training programs that are accredited by an organization recognized by the U.S. Commissioner of Education. This provision would ensure standards of quality but would not exclude fully accredited programs as occurred because of the definition of a "training center" contained in the present legislation.

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#### STATEMENT OF AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

The American Occupational Therapy Association wishes to commend the Chairman and the members of the Subcommittee on Public Health and the Environment for their sponsorship of H.R. 9341 to amend the Public Health Service Act to establish new programs of support for the training of public health, community health, and allied health personnel.

The AOTA represents some 14,000 registered occupational therapists and certified occupational therapy assistants. Our Association in conjunction with the Council on Medical Education of the American Medical Association accredits the 42 collegiate programs in occupational therapy. The 37 junior and community college programs in occupational therapy education are also accredited by the AOTA.

The Association fully supports the continuation of Federal financial assistance for the education and training of allied health personnel. We trust that the flexibility of this proposal will improve the program's responsiveness to our ever-changing health system rather than accentuate the capriciousness of Federal support. It is unreasonable to encourage expansion and experimentation and then to withdraw support before plans can be implemented or new programs can prove themselves.

The program of grants and contracts authorized by Section 795 of H.R. 9341 would permit continuation of many worthwhile programs now funded. It also has much potential for improving the quality of training provided for allied health personnel, strengthening programs designed to make better use of existing resources and encouraging more cooperation among the various allied health professions in both educational and clinical settings.

This section of the bill authorizes Federal support for several categories of activities and programs to which our profession has already committed itself. One new program in a neighboring state, for example, has been set up in such a way as to integrate the basic professional and technical preparation of occupational therapy personnel and make more effective use of available educational resources, both academic and clinical, throughout the state. Federal financial support is providing an essential stimulus to the development of this new model and will undoubtedly continue to be needed, especially if the program is to be successfully replicated in other parts of the country.

In the state of Hawaii an on-going grant entitled "Health Manpower for Hawaii and the Pacific Basin" has been instrumental in initiating five allied health programs; including one for occupational therapy assistants, which was to be started in 1973. Others for medical record assistants and environmental assistants have been targeted for '74 and '75. Without assurances of continuing Federal support during the initial two or three years of operation, it is unlikely that these programs, all of them badly needed, will survive.

Having just completed the first phase of a contract to delineate the roles and functions of occupational therapy personnel in the detail needed to serve as the basis for development of proficiency examinations, the AOTA also supports Subparagraph 6 of Section 795 concerning proficiency requirements for allied health personnel. Continuing Federal support as well as additional legislative or administrative guidelines will be needed to insure that the mechanisms called for in Section 241 of Public Law 92-603 include both written and practical tests of the knowledge, skills and attitudes required for acceptable practice. A passing grade on a formal or written examination alone is necessary but does not insure clinical competence. Observation of skills or supervised experience are also required to judge a candidate's proficiency.

We also wish to strongly endorse those provisions of H.R. 9341 authorizing grants and contracts for programs designed to facilitate re-entry into the allied health fields. In fields like ours in which the majority of practitioners are women, the need for refresher courses available at periodic intervals in various sections of the country is particularly acute.

In this context, we are disappointed that the bill makes no specific mention of the need to encourage continuing education for allied health personnel. In view of the pace of technological advancement, it behooves practitioners to constantly update their knowledge and skills. As a professional organization, the AOTA has voted to make participation in continuing education a prerequisite for continuing certification as a therapist or assistant. Although individual therapists will be expected to assume the cost of participation, the design, organization and management of meaningful programs will require additional support if they are to fulfill their purpose.

Interdisciplinary education also warrants more emphasis than it receives in H.R. 9341. The occupational therapist who works with developmentally disabled children may require training in special education before she can utilize her skills in a public school system. Opportunities for such special training should be encouraged, as should those for teachers who seek to benefit from some of the training available in occupational therapy curriculums. The occupational thera-

pist can make an important contribution to community health programs, and in turn can benefit from the course of study in graduate schools of public health. Opportunities for interdisciplinary education will broaden the perspective that educators, allied public and community health practitioners bring to the delivery of services to people and should therefore receive as much encouragement as possible. Such a policy would also contribute to the development of lateral as well as vertical career ladders and lead to closer cooperation and coordination among providers of health educational and social services.

The American Occupational Therapy Association wishes to record its enthusiastic support for the provisions in H.R. 9341 authorizing advanced traineeships for allied health personnel who aspire to teaching, administrative and supervisory positions in their respective fields. To produce trained educators and researchers is expensive and time-consuming yet without them we cannot maintain high-quality training programs. Moreover, the salary levels in most allied health fields do not permit practitioners to set aside funds for advanced education or to forego earnings while taking time out for graduate-level studies.

The need for educators is particularly acute in occupational therapy. Practically every curriculum at the community college, baccalaureate and graduate levels has at least one unfilled faculty position. Four established schools have been unsuccessful in prolonged attempts to recruit curriculum directors for their basic professional degree programs. Nine developing programs have been unable to become operational because of the scarcity of qualified curriculum directors. Still other colleges have been forced to appoint less qualified personnel on a provisional basis in order to keep existing programs operating. As experienced educators reach retirement age in the years immediately ahead, the current shortage of teachers is expected to become even more critical. Our only recommendation regarding Section 796 of the bill, therefore, would be to increase substantially the proposed authorization of \$7.5 million in view of the fact that many, if not all of the allied health professions, are faced with serious shortages of well-qualified educators.

The proposed definition of allied health personnel found in Section 794 is, we believe, open to misinterpretation. As presently written, this definition could embrace all health personnel except the physician, the dentist and the environmental engineer. It also fails to take into account that allied health professionals have a unique competence unrelated to the physician's function.

To illustrate, the pharmacist and the nurse, certainly support or complement the professional functions of the doctor. Yet neither of these groups have been included in the past under legislation for allied health training, nor would the proposed levels of authorizations for appropriations in this bill be adequate if a broadened interpretation were to be used.

Some allied health professionals serve primarily to extend the limited time of the physicians, or to carry out tests and activities which are medically necessary. On the other hand, the role of the occupational therapist in a school system, in a residential facility for the mentally retarded and in other settings demonstrates a unique competence unrelated to the physician's function. We trust the Committee's report will speak to these issues.

Furthermore, it should be noted that health care is provided not only for "patients" but also for nonpatients, people seeking preventive services either on an individual or group basis. We suggest that the definition refer to "the provision of health care" rather than the "delivery of health care to patients."

The continuing need for more accurate statistical information about allied health personnel makes the information gathering and reporting activities authorized in Section 798 of the bill imperative. We would like to suggest, however, that the Secretary be directed to work closely with the various associations in the allied health field in collecting and updating such information. Cooperative efforts to establish compatible baseline information are vital if the present lack of accurate statistics is to be corrected.

In summary, the American Occupational Therapy Association supports the enactment of this measure to provide assistance for the training of public, community and allied health personnel. We have tried to suggest additional purposes for which grants and contracts are needed. We also hope that the Committee will include in its report a strong statement calling for continued support to those new and developing programs already initiated or on the drawing boards in response to the continued shortage of allied health personnel.



## STATEMENT OF AMERICAN OPTOMETRIC ASSOCIATION

Mr. Chairman and members of the Committee: The American Optometric Association would like to place on record its views concerning several aspects of H.R. 9341, the legislation to amend the Public Health Service Act, and specifically those provisions concerning the training of Allied Health personnel.

The American Optometric Association is a national professional organization with total membership of 17,827 from all 50 States and the District of Columbia. Of the 20,736 optometrists licensed in the Nation today, 14,305 are actively engaged in full time practice in the private sector, in the military or other government agencies, or in research and education.

The increasing demand for professional vision care has produced and compounded a severe shortage of optometrists, to whom over 70% of all Americans turn for this primary health service. Even with the considerable financial assistance that schools and colleges of optometry have received from the Federal government under the Comprehensive Health Manpower Training act, it is anticipated that a shortage of some 12,000 optometric practitioners will prevail in 1980, as the result of several factors including attrition by death and retirement and the demand for services by a larger population with greater life expectancy. The provision of certain vision care services in major Federal and State health care programs also has had considerable impact on generating the shortages now being experienced.

Optometry, as in the case of other major independently prescribing health professions, has sought relief from this serious situation by carefully analyzing the tasks and functions of its practitioners and their ancillary personnel, in an attempt to identify those areas of care which might properly be delegated to optometric assistants, technicians and technologists. Such delegation of functions, under the direct personal supervision of optometrists, has been and continues to be, an efficient method of improving the efficient utilization of the optometrist's time and reserving his highly developed skills for those matters which require his professional judgment.

With these factors in mind, the American Optometric Association supports the extension and expansion of the Allied Health Personnel training programs authorized by the Act, to the end that large numbers of well qualified vision care personnel can be trained in the community colleges and other institutions which have established or wish to establish training programs for such ancillary personnel.

Total employment of paraoptometric personnel in America today is approximately 5,500, counting all individuals who perform functions which involve direct assistance to the professional in such areas as taking of case histories, performing certain routine examination procedures, conducting orientation and instruction for new contact lens wearers, and working with patients undergoing orthoptics and vision training.

The number of fully trained paraprofessionals in the vision care field must be increased. Because professional vision care is a major national health resource. It stands to reason that such an increase in the production of ancillary personnel is a proper concern for the Federal government to the extent that such training can result in the conservation and better utilization of professionals whose education is necessarily of longer duration and therefore more costly.

As an organization, the American Optometric Association supports the basic concept of H.R. 9341, and commends its sponsors for an enlightened approach to the allied health programs. We agree that it is desirable to have all health manpower legislation expire at the same time as other major health programs so that manpower considerations can be taken into account as an important element in the larger picture whenever such programs are up for renewal. The recodification of the Public Health Service Act also appears to be desirable from the standpoint of better coordination of all manpower activities under one Section of the U.S. Code.

It is necessary, however, to call your attention to those sections of H.R. 9341 which are of special concern to optometry.

One is Section 794 which contains a definition of "allied health personnel." We urge that the committee specifically identify all four of the independently prescribing health professions whose practitioners are personally responsible for delivery of health care services to humans. We recommend the phrase "and other health professionals" be deleted and replaced with the words "optometrists and podiatrists."



All too frequently, we have found that administrative interpretation of definitions lacking specificity lead to the exclusion of optometry or optometrists from conduct of the program(s) authorized, even though language of committee reports and other documents clearly indicate Congressional intent that optometry and its practitioners are to be included. This is unfair to the beneficiaries of the programs—in this case the institutions and the students requiring some type of Federal assistance—and likewise unfair to present and future patients who may experience undue delays or reduced quality of service engendered by the requirement that the professional must divide his time too many ways to provide any patient the service he or she deserves. Existing language of the Allied Health Personnel Training Act of 1966 as amended in 1970 does specify optometric technician and technologist training programs as eligible for Federal support, and we have reason to believe that optometry would have been excluded from the implementation of the present law had such specific language not been included.

The American Optometric Association is fully aware of the administration's attitude toward categorical grants, and of a similar view which reportedly pervades this committee. With this in mind, we will not belabor the point of the need for continuation of basic and special improvement grants which hold so much potential in the area of start-up funds for programs in these areas. Suffice it to say that we believe funding for start-up and operation of on-going allied health manpower programs is necessary in the case of vision care ancillary personnel. The need for such individuals is established; the mechanisms already exist; the research and development phase has, in effect, already been undertaken. If, however, in the wisdom of the Congress more experimental programs are required, optometry will be happy to oblige by providing whatever additional information is needed, trusting such further experimentation will supply a sound basis for continued support of institutions and students involved in the training of paraoptometric personnel.

Our association stands ready to provide the committee with any further information it may require in the course of consideration of this or related legislation. We appreciate the opportunity to express our views on H.R. 9341, and once again urge its passage.

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STATEMENT OF HENRY C. WESSMAN, R.P.T., ASSOCIATE PROFESSOR AND CHAIRMAN, DEPARTMENT OF PHYSICAL THERAPY, UNIVERSITY OF NORTH DAKOTA SCHOOL OF MEDICINE, GRAND FORKS, N. DAK.

This statement, which is concerned with my views in regard to funding for Health Manpower Education via federal mechanisms, comes to you through the invitation which I received from W. E. Williamson, Clerk of this astute Committee. I thank you for giving me an opportunity to present my views.

Over the past several years, the term "Allied Health" has been glibly substituted by some persons for all health professions outside of medicine and nursing. In this broad context, it encompasses various fields of endeavor and levels of training. From the six week OJT to the eight year Ph.D., all have been conveniently classed by some persons as "Allied Health". Also, there is no one group which speaks for all of Allied Health. The individual Allied Health professions, from the more sophisticated, such as Physical Therapy, Medical Technology, to the lesser trained, such as the Nurse's Aide, have needs and goals which are different, and which defy amalgamation into one common grouping—they are, in fact, distinct and separate fields in the health care delivery system.

This is the crux of my short testimony. In your wisdom you have given us a one year reprieve with federal funding for Allied Health Education through Public Law 93-45. It is my hope that through this year, Committees, such as yours, will take a close look, not only at the funding programs, but at the programs funded. I believe that when you do have an opportunity to take a closer look, you will see that there are various levels of strata of Allied Health workers. You will see that there are fields, again, such as my field of Physical Therapy, which demand a high degree of expertise and judgmental knowledge on the part of the practitioner in order to function to the best advantage for the patient. I think, as you examine the various fields in the Allied Health area, that you will find there is a need for carefully controlled and structured funding from federal sources for certain Allied Health fields.

I have had an opportunity to peruse the statement of the Honorable Caspar W. Weinberger, Secretary of Health, Education, and Welfare, from written testimony on H.R. 5608, which he presented to this Committee on March 29,

1973. I would take issue with the Honorable Secretary on several points which he made. I would disagree, for instance, with his statement that "Federal involvement should be centered on the general student assistance programs administered by the Office of Education", rather than funding through Health Manpower. The Secretary indicates the President's commitment to remove financial barriers to a college education. But, I would remind you that a college education per se does not have the economic, social, or personal reward-producing ability that would be found in education which specifically equips someone to satisfactorily compete and complete a course of life-long work. We cannot remove the financial barriers to a college education, or to any education, if you remove the funding to the various programs which are going to make that college education rewarding, not only for the individual but for the economy of the country. There must be continued federal support for funding in health education and health education curricula, and this is not just at the level of the M.D. or the D.D.S. Obviously, the physician is the "team captain" in the health care delivery system. But, equally as obvious, the physician cannot do all the work on his own. And equally as obvious to that, federal funding proportionate to the amount of responsibility of the various team members is a logical and legitimate request.

The Honorable Secretary also implied that in some instances programs have other sources of support sufficient to operate the educational programs. In the area of Allied Health, particularly in Physical Therapy, this is not true. At the present time, there are two basic sources of federal funding for Physical Therapy and certain other Allied Health professions. These are the Social and Rehabilitation Services Section of HEW, and the Division of Allied Health Manpower of the Bureau of Health Manpower Education of the PHS. As currently written, the authorizing legislation for these two areas do indicate a separation of function. The Division of Allied Health Manpower is primarily concerned with program support, while SRS funding is concerned with program support and also provides traineeship funding for certain of the Allied Health professions. Unless an equitable melding of all functions from both areas could be conceived and established, it would appear that funding is necessary in both areas for all functions involved. At the state level, the revenue-sharing concept has, in most instances, not proven to be an effective vehicle for transmission of tax monies back into the state system, particularly such monies which conceivably in turn might benefit education for health manpower. The revenue-sharing concept, while perhaps reading well, nonetheless contains many pitfalls. The major one, of course, is that the administrative mechanism for disbursement of revenue-sharing funds, at the state level, is not geared to the important task of equitable disbursement of revenue-sharing funds for all levels of education. A particular concern of mine is the implication that revenue-sharing funds would, or could, be used to replace federal funding of various programs such as federal Health Manpower Education. In reality, however, people at the state level who are in a position to make judgment concerning the distribution of the revenue-sharing funds, had or have no guidelines or even suggestions as to what federal programs these revenue-sharing funds must now replace. In addition, you now have a multiplicity of unrelated programs all seeking funding from the same revenue-sharing monies. Thus, no longer can the merits of one request for funding in one area (such as Allied Health) be judged against the merits of another request, such as could be accomplished at the federal level; but rather, requests from fields (such as Allied Health) must now be judged against totally unrelated areas requesting support from the same revenue-sharing funds at the state level.

The June 2, 1973 edition of the *1973 Congressional Quarterly* (Page 1395) lists a report of the omnibus Extension Bill H.R. 7806 providing support for one year for the various government health programs. This article notes that HEW officials argued that administrative opposition to the extension of five programs (Hill-Burton Hospital construction, Regional Medical Programs, Community Mental Health Centers, Allied Health and Public Health Training) was based on failure of the programs, or duplication of funding available from other sources. I have already discussed what I feel to be a discrepancy in the concept that other sources of funds (state or other federal) are available. I am sure that the Committee is quite aware that even the level of funding from state sources varies from state to state for the various Allied Health Educational programs, thus adding but one more confusing variable. I would also argue the point concerning the fact that the Federal Funding Programs for Allied Health Manpower

Education have not worked. As an Educational Administrator of an Allied Health program, (Chairman, Department of Physical Therapy, University of North Dakota School of Medicine) I can specifically relate to you our experiences and can point with pride to the fact that our program has worked, and that it would not be in existence today if it were not for federal support. I joined the faculty of the University of North Dakota School of Medicine in 1967 as the first Chairman of the Department of Physical Therapy. We initiated a training program for physical therapists in this geographic region because there was, and continues to be, a documented need for this level of health worker in the Northern Great Plains region. This program would not have been started had it not been for the Basic Improvement Grant which was funded through the Division of Allied Health Manpower back in the late 1960's. I accepted the challenge to initiate this program for the training of physical therapists primarily for two reasons: 1) When initiated, and continually to this time, there is a readily identifiable need and market for our graduates in the geographic area of North Dakota, South Dakota, Montana, Wyoming, and Northern Minnesota. 2) The rationale of our approach to the problem of supplying physical therapists was, and continues to be, our belief in the importance of producing a quality versus quantity product. This is becoming increasingly evident in our regional area where the rural placement of our graduates demands that they be the most knowledgeable, flexible, and clinically-oriented physical therapists that it is possible to graduate. We also feel that our success in this area has been demonstrated to a fairly high degree.

Since 1970 (the year the first class was graduated) to the present time, the program in Physical Therapy at the University of North Dakota has graduated 55 professional physical therapists. Of this number:

(1) 42 are native North Dakotans, 10 Northern Minnesotans, 1 Montanan, 1 Idaho student, and 1 Manitoba student.

(2) 52 are from sparsely populated, rural areas with at least 7 eligible for economic opportunity grant support due to low family income.

(3) 33 are female (17 married); 22 are male (17 married).

Of the 55 graduates of this program who are eligible to practice:

(1) 23 are practicing in North Dakota, 13 are practicing in Northern Minnesota, 2 in South Dakota, 1 in Wyoming, 2 in South Carolina, 2 in Oregon, 3 in Arizona, 2 in Florida, and 1 each in the states of Missouri, California, Indiana, Tennessee, Michigan, and Wisconsin. One graduate is currently with her USAF husband in England and is unemployed.

(2) 11 of the graduates are in one-man, rural (5,000 people or less) departments; 12 are in two-man departments in rural areas; 24 are in medium-sized cities; and 7 are in metropolitan settings.

The 55 students who were accepted into the program survived the following numbers in the UND pre-professional Physical Therapy program ranks as follows:

	Freshmen	Sophomores
1967 to 1968.....	22	29
1968 to 1969.....	25	37
1969 to 1970.....	30	41
1970 to 1971.....	52	44
1971 to 1972.....	46	96
1972 to 1973.....	45	107

The above numbers are for the University of North Dakota only—this does not include pre-Physical Therapy programs in the region. The approximate total numbers of students seeking information and/or acceptance into Physical Therapy at the University of North Dakota since 1967 are:

	Number	Students accepted
1967 to 1968.....	46	9
1968 to 1969.....	120	12
1969 to 1970.....	180	19
1970 to 1971.....	360	15
1971 to 1972.....	480	17
1972 to 1973.....	875	23

I have interjected the above figures for the purpose of impressing upon you:

(1) The high degree of interest in the Allied Health fields which is shown by many students.

(2) The ability of our program in Physical Therapy to accept highly qualified students, retain these students through the professional program (essentially "0" attrition rate), and to see each of these persons successfully licensed to practice.

(3) The ability of our program to "put our money where our mouth is"—to deliver highly qualified, well-trained health workers to the area where we saw the greatest need—the rural areas of the Upper Great Plains (35 of 55 graduates). Our program has certainly not been a failure or a misuse of valuable federal monies.

The task before you, obviously, and before the Administration, is to ascertain those programs which have, in fact, produced at the level that they indicated they would when applying for Allied Health grant funds. The most basic of all priorities and contentions must be that tax monies, which are used for educating American Youth, must in turn pay dividends for those educated as well as, and most importantly, for the people who paid the taxes. That is why I am so concerned about careful accountability and justification of grant funds. But that is why I am also concerned that there must be funding of specialized educational programs, such as the proven Allied Health fields. Those programs that can clearly delineate their success, such as the one with which I have been fortunate enough to be associated with, should be, and must be, eligible for funding at the federal level. In the case of our Department, the program was initiated and continued contingent upon our assessment of need for the type of health worker that we produce. Our program is not based on projections, population numbers, or other nebulous factors; the need is based on solid facts which were initially determined by survey, and have subsequently been proven by actual employment of our graduates in the geographic region that we serve. Our program in Physical Therapy education at the University of North Dakota is not the type of program that was built on grandiose ideas of what someone thought the public needed; this program was built on the solid fact of obvious need and subsequent fulfillment of need. These are the types of programs in Allied Health that continue to merit federal support.

As we look to the future, it is obvious that some system of priorities must be established for federal funding of health education. In addition to the priority I indicated previously, that is, relating the need for federal support directly to the length of training for the Allied Health discipline, the basis for these priorities should be the proven success derived from previous funding of Health Manpower Education programs. I would agree with the Honorable Secretary Weinberger, when he contends that the federal purse is not "bottomless". And, apparently, we will not be "topless", if the Administration wish for funding of the Physician-Health Team Leader is continued. But, I am concerned about the rest of the "anatomy" of the health care industry. I am concerned about the "muscle" and the "skeletal framework" that makes up the health care delivery system. To a large extent, this encompasses what we call the Allied Health area. I am sure that you are aware that in the field of Rehabilitation, my own specialty of Physical Therapy is frequently referred to as the "Trunk of the Rehabilitation Tree". Such a framework upon which to build a health care delivery system is essential. But again, the prudent approach is to see that those supportive fields which need and deserve federal support have a source of such support available to them. In support of my request for continued controlled federal funding in Allied Health Education, I beg to call to your attention the following points:

(1) The "team approach" is, in many "working" hospitals and clinics, a very real and necessary component of patient care. I believe that the rationale used by the Administration in regard to continued funding for physicians (the "team captain") while terminating funding for the training of the other health care workers, is not a judicious move. We do, in fact, need health workers and support for Health Manpower Education at other levels. As indicated previously, it may very well be that the amount of support needed can be closely equated to the amount of time spent in training for the various levels of health workers.

(2) Also, I would remind you that some patient care disciplines, such as my own field of Physical Therapy, have been around for many, many more years than current Allied Health "fadists" would care to admit. By their very nature, a field such as Physical Therapy, with its inherent stability, should be dealt with as an entity unto itself, rather than being lumped into a group with all Allied

Health program. As you are aware, many of the Allied Health programs are Associate Arts Degree programs or less. Those programs that have proven themselves, however, such as Physical Therapy, and certain other of the 4 to 5 year baccalaureate programs, have demonstrated their worth in patient care, and should be worthy of special consideration as a very essential and highly skilled component of the health care team.

What I am implying, obviously, is that there continues to be a need for federal funding in many areas of Health Manpower Education. I strongly believe that we must establish priorities in the health care industry, and then seek the help of the professional groups involved (in the case of my profession, the American Physical Therapy Association) in meeting these priorities. In Health Manpower Education, we must look at the individual programs, at the products, and at the quality of what we are getting for the tax dollars spent.

Particularly, I would note the following Health Manpower Education areas as being those which need continued federal funding. These areas are listed in order of priorities that I would personally have, with Number 1 being the most important. I believe that this list, when integrated with a list of federal priorities for comprehensive health care, would formulate the basis for funding of Health Manpower Education within the area of Allied Health.

(1) There is a need for *basic support* for existing, accredited educational programs in Allied Health. Such federal support should be reliable and solid, for a specific period of time, and should be available to those programs that have demonstrated an ability to meet their commitment under the Allied Health Basic Improvement, Special Improvement, or Special Project grant mechanisms.

(2) *Continuing education in the Allied Health areas.*—This is extremely important at this time when we must think in terms of quality instead of quantity in the Allied Health fields. Again, in my own field of Physical Therapy, and in the rural setting in which I practice, the concept of continuing education is essential if the practitioners in the smaller communities are to remain current in their techniques of care. Linkage of continuing education with graduate programs, or professional association participation acknowledgement, in the rural areas would also be of considerable benefit. This would enable the practitioner to be working toward a visible goal of graduate degree completion or professional association recognition while performing a very necessary and worthwhile service in the rural community.

(3) *Research.*—Particularly of the very basic modalities that we use in a field such as Physical Therapy, is extremely important if we are to continue to improve our level of patient care. Because of the extreme expense of these types of programs, I believe it is realistic to assume that federal monies should be made available for such activities.

(4) *Traineeships.*—There is the continuing need for traineeships and/or guaranteed loans in the Allied Health professions. Such guaranteed loans would best be patterned after the National Defense Program or National Health Service Scholarship Program. In any case, such traineeships should include a forgiveness clause if the student immediately goes into practice. Particularly, there should be a 100 per cent forgiveness if the student practices in a target area, such as a ghetto or rural area.

(5) The minimum need, I feel, is in the area of demonstration, innovation, or support for new programs. Funding in this area should be available only for demonstration projects which relate to the improvement of the delivery pattern for health care. Particularly involved here might be the aspects of: 1) Getting students into the rural and ghetto areas for their affiliations or internships.

At this point in time, there need be no emphasis placed on federal financial assistance for the development of new programs of instruction in the Allied Health fields.

Finally, I believe that there are certain factors which should be considered when suggesting criteria for funding Allied Health Manpower Education. The mechanism (See Page 14a) which I have detailed, while undoubtedly not workable in toto, nonetheless has certain aspects which I feel the Committee may be able to use when formulating legislation for funding in Allied Health Education.

The following factors should be considered when suggesting criteria for funding in Allied Health Education. These are listed in order of my personal priority, beginning with Number 1.

(1) *Accreditation.*—At this point in time, the total market for the Allied Health program-product is a questionable entity. With this in mind, it would be a more judicious use of federal funds if the established, accredited programs were given priority. This is in the best interest of the public, the student, and the pro-

fession. It is important that the University in question demonstrate an ability to begin a program without initial involvement of federal funds. This would be a concrete demonstration of their interest and ability to maintain the program, and would precede the Accreditation process.

(2) *Association with a Medical School or Large Teaching School.*—This is important, not only from the accreditation standpoint, but from the fact that there is a tremendous amount of basic science and human science material which can be gained only through proper support of a Medical School or large teaching hospital.

(3) *Allied Health Product Success Index.*—If we are really serious about building quality into the grant mechanism, then we must look at what has been done with previous money, and not at what someone intends to do with new money. The amount of funds available to any program should be based on the *product* of that program. In our case, this is the *Physical Therapy Graduate* of any given program. The four points listed below (the Quality Predictors) will give a picture of the success of any given Allied Health program. It will demonstrate the ability of that program to accomplish the intent and objectives of previous federal grant funds. By establishing a ratio of the Quality Predictors, you could eventually establish an Allied Health Product Success Index (see Page 14a). This Index could be used with a capitation form of grant mechanism, to allow for both quality and quantity. By giving the different weights to the ratios listed below, the Quality Predictors would have meaning in regard to documenting the product. (With such an approach, you would need some sort of a form that the graduate would fill out that would certify his/her current accomplishments, and would serve as a proof of documentation of the home institution. The proof of this documentation would not rest with the Federal Government, but would rest with the individual institution. The understanding would be that they would be seriously penalized if inspection would indicate that their graduates were not doing what they implied they were.)

The Quality Predictors which are important include:

(a) A ratio of the number of students accepted into the program to the number of students finishing the program.

(b) A ratio of the number of students finishing the program to the number of graduates gainfully employed within the profession (1-2 years post-graduation).

(c) A ratio of the number of graduates gainfully employed to the number of graduates participating in continuing education activities and professional affairs on a local, state, and national level (1-2 years post-graduation).

(d) A ratio of the number of graduates gainfully employed to the number of graduates employed in ghetto or rural areas.

The attached sheet (see Page 14a) indicates how such a mechanism might work.

(4) *Matching Fund Program.*—In order to assure the proper use of funds, to supplement rather than to supplant, there should be an inclusion in the Allied Health Manpower Education funding mechanism for matching funds. This would be based on the amount of solid institutional money available for that program.

(5) *Capitation Funding.*—If some type of Allied Health Product Success Index could be developed, then a capitation grant mechanism could be made available. Such a mechanism might be in any amount (on Page 14a for ease of calculation, I have used an arbitrary \$10,000 per program, plus \$1,000 for each student). This would be available *only* to the accredited baccalaureate degree Allied Health Science programs. The rating of the individual program on its Allied Health Product Success Index would then be multiplied by the total theoretical amount available via capitation, and a portion of the total would then be the actual amount of the allotment to each program. Such a mechanism would take into account the size of the program and the quality of success of the program to produce what it is intended to produce.

This brings to a close my rather disjointed presentation. Again, thank you for this opportunity to present my views on Health Education Funding to this Committee. As the year progresses, and as your important deliberations continue, please remain continually cognizant of the concern of all practitioners in Allied Health, and of the concern of the professional associations themselves. Providing quality health care is our only goal. This begins with quality education in the health fields. I know this is the ultimate concern of this Committee as well. Thus, can we work together on this problem that affects every American? I would urge you, that when, in your wisdom, you begin to formulate policy concerning funding in Allied Health Manpower Education, that you go directly to the professional organizations involved to seek their help. In the case of my profession, this would be the American Physical Therapy Association. I sincerely believe that groups such as the APTA are in a position to assist you in establishing a factual basis

for your deliberations. I am also presently confident that you will not receive a "biased" or "vested interest" view from these professional groups. I can state this because, as health professionals, our first and primary concern is quality patient care, stemming from a sound scientific basis of practice.

And, once again, if there is anything further that I might personally do to assist this Committee, I would be honored to do so.

Thank you.

#### ALLIED HEALTH PRODUCT SUCCESS INDEX

	Program A	Program B
Number of students accepted.....	100	10
Number of graduates.....	90	10
Number practicing.....	70	10
Number active.....	60	10
Number of ghetto and rural.....	10	5
Percent ratio of graduating/accepted.....	90	100
Percent ratio of practicing/graduates.....	77	100
Percent ratio of active/practicing.....	85	100
Percent ratio of ghetto/practicing.....	14	50

Program A	Arbitrary total possible	Program B
9=90% X.....	Ratio 1=10.....	X 100%=10
15=77% X.....	Ratio 2=20.....	X 130%=20
25=85% X.....	Ratio 3=30.....	X 100%=33
6=14% X.....	Ratio 4=40.....	X 50%=20
55.....	AHPSI.....	80
Capitation plus AHPSI: \$10,000 per program. \$1,000 per student.		

Program A:	Amount
Basic.....	\$10,000
100 students.....	100,000
Total.....	110,000
AHPSI (times).....	55
Actual allotment.....	60,500
Program B:	
Basic.....	10,000
10 students.....	10,000
Total.....	20,000
AHPSI (times).....	80
Actual allotment.....	16,000

Note: Additional factors—1. If it costs \$3,000/P.T. Graduate, program A receives approximately 20 percent of total program cost. Program B receives 53 percent. 2. Could have dollar amount limited by 50 percent limit—ceiling, or matching basis, or some combination thereof.

#### STATEMENT OF REV. T. BYRON COLLINS, S. J., IN BEHALF OF GEORGETOWN UNIVERSITY SCHOOLS OF MEDICINE AND DENTISTRY, AND DR. JAMES J. FEFFER, IN BEHALF OF GEORGE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

Mr. Rogers, Mr. Nelsen and members of this committee, I am Rev. T. Byron Collins, S. J., Special Assistant to Fr. Henle, President of Georgetown University. With me is James J. Feffer, M.D. Vice President of The George Washington University.

This is a request for help in obtaining the immediate solution of the financial problem which threatens the continued existence of The George Washington University School of Medicine and the Georgetown University Schools of Medicine and Dentistry.

Our schools received grants under your legislative program for the last three years. As you know, this section of the legislation will provide only \$10,000,000 for this present 1974 fiscal year. For fiscal 1975 this section provides no financial distress funds.



In view of the national picture for the continuance of financial distress funds, perhaps you would consider amending the present legislation by increasing the provision of financial distress funds for the present fiscal year. We suggest the amount be raised for fiscal year 1974 from \$10 million to \$15 million.

If this step should be taken, may we request consideration of a section in the report that would take cognizance of the especial difficulties of the two of three medical center schools in the District, i.e. the George Washington and Georgetown Universities. Howard University now receives direct federal funding for its medical and dental schools.

We attach documents that present in detail our financial distress needs.

On behalf of our Presidents, Dr. Elliott and Fr. Henle, we thank you for your interest and counsel in our medical and dental school difficulties.

*Georgetown University Medical Center School of Medicine, projected operating statements (year ended June 30, 1974)*

Revenues:

Tuition and fees	\$2, 530, 000
Endowment	140, 000
Annual giving	90, 000
Sponsored programs	8, 244, 000
Capitation	1, 450, 000
Physicians augmentation program	1, 561, 000
Professional services	1, 800, 000
Student aid	150, 000
Other	435, 000
<b>Total revenue</b>	<b>16, 400, 000</b>

Expenditures:

Direct instruction	6, 545, 000
Sponsored programs	6, 835, 000
Library	175, 000
Allocated overhead expense	3, 286, 000
Staff benefits	1, 040, 000
Student aid	270, 000
<b>Total expenditure</b>	<b>18, 151, 000</b>
<b>Revenue under expenditure</b>	<b>-1, 751, 000</b>

*School of Dentistry, projected operating statements (year ended June 30, 1974)*

Revenues:

Tuition and fees	\$1, 650, 000
Endowment	10, 000
Annual giving	42, 000
Sponsored programs	850, 000
Capitation	860, 000
Dental clinics	960, 000
Student aid	50, 000
Other	5, 000
<b>Total revenue</b>	<b>4, 427, 000</b>

Expenditures:

Direct instruction	2, 561, 000
Sponsored programs	724, 000
Library	85, 000
Allocated overhead expense	1, 635, 000
Staff benefits	241, 000
Student aid	130, 000
<b>Total expenditure</b>	<b>5, 376, 000</b>
<b>Revenue under expenditure</b>	<b>-949, 000</b>



THE GEORGE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE  
OPERATING BUDGET SUMMARIES

	Budget 1972-73	1972-73 current estimate	Proposed 1973-74
<b>Estimated income:</b>			
Tuitions and fees:			
Medical students and university credit.....	\$1,542,000	\$1,605,000	\$1,840,000
Allied health students.....		178,000	357,200
Investment income.....	155,000	155,000	158,000
Gifts and grants:			
General.....	493,000	490,000	633,778
Federal.....	2,264,625	1,622,000	( <sup>1</sup> )
National.....	977,000	912,000	1,060,000
Sponsored programs.....	5,803,000	5,803,000	5,900,000
<b>Total.....</b>	<b>11,234,625</b>	<b>10,765,000</b>	<b>9,948,978</b>
<b>Estimated expense:</b>			
Administration and general.....	1,672,994	1,670,000	1,480,132
Instruction.....	2,809,020	2,740,000	3,990,817
Library.....	234,415	235,000	280,837
Physical plant.....	1,325,196	1,020,000	1,750,451
Sponsored programs.....	5,193,000	5,100,000	5,100,000
<b>Total.....</b>	<b>11,234,625</b>	<b>10,765,000</b>	<b>12,602,237</b>
Estimated deficit <sup>1</sup> .....	0	0	(2,653,259)

<sup>1</sup> Application will be made to DHEW for a distress grant to cover the estimated deficit, as was done for the years 1970-71, 1971-72, and 1972-73.

AMERICAN HOSPITAL ASSOCIATION,  
WASHINGTON SERVICE BUREAU,  
Washington, D.C., July 27, 1973.

HON. PAUL G. ROGERS,  
*Chairman, Subcommittee on Public Health and Environment, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.*

DEAR MR. CHAIRMAN: The American Hospital Association, which represents nearly 7,000 hospitals and other health care institutions located in all parts of the country, appreciates the opportunity to place before your Committee some comments and suggestions in regard to H.R. 9341, the "Public and Allied Health Personnel Act of 1973."

As you know, the American Hospital Association supported the bill developed by your Committee, now Public Law 93-45, extending the Public Health, Allied Health, and ten other authorities for a one-year period. We commend your Committee for thereby continuing these important programs pending the detailed legislative review of all Public Health Service Act authorities including those currently being considered by your Committee.

H.R. 9341 would revise two programs: Public Health and Allied Health Training. Ours is a labor-intensive industry in which these types of skills are important for efficient and effective operation and, thus, of substantial interest to hospitals.

There is in this country a large and growing need for well-trained health administrators and public health specialists. The changing patterns in the delivery of health services, including the anticipated growth of Health Maintenance Organizations and the likelihood of a National Health Insurance system, will necessitate an increase in the number of health management specialists. Moreover, the quality of health administrators should also be increased thereby enhancing the cost-effectiveness of programs increasingly funded by government.

The Administration's proposed decentralization of government health programs through revenue sharing and other means further emphasizes the need for additional numbers of public health specialists and health administrators. For these reasons we support a continuation of the Federal role in Public Health Training.

I would now like to comment briefly on certain aspects of the legislation before the Committee.

Section 791A of H.R. 9341 provides for project grants and contracts in the area of Public and Community Health personnel. We applaud this section's

recognition of the need for studies and demonstrations in the various areas listed. We are also pleased to note the inclusion in the definition of "eligible entities" of health entities having arrangements with graduate degree-granting institutions. This would clearly include hospitals affiliated with such institutions for the purpose of providing clinical training.

Section 791B of the bill would provide for institutional grants to schools of public health and other educational entities having accredited graduate programs in health administration or health planning. While we agree with this approach, we have some reservations about the completely open-ended authority allowed the Secretary of HEW in setting enrollment increase requirements. Your Committee might consider lessening the scope of this authority somewhat by setting enrollment increase requirements legislatively.

Section 792(a) (1) of the bill authorizes a traineeship program, the purpose and administration of which is very unclear to us. Moreover, there seems to be no authorization of appropriations covering these fellowships. We feel that this section of the bill requires considerable clarification.

Section 793 of the bill requires HEW to produce and disseminate numerous statistical analyses as well as an annual report. We believe this data collection and dissemination is important and we hope the committee will make certain that provision is made for adequate funding of this section.

The other programs authorized by H.R. 9341 concern the important field of Allied Health Training.

Section 795 of the bill authorizes a program of project grants and contracts, and, again, wisely makes hospitals affiliated with educational entities eligible for participation. This is extremely important, since many hospitals are active partners in the education of allied health personnel. At the present time approximately 1100 hospitals provide clinical facilities for 7083 allied health programs in educational institutions. For most hospitals the costs of training allied health personnel cannot be completely offset by payments for the health services rendered. In fact, third-party payors such as Blue Cross have placed limitations on hospital payments for education. It is important, then, that the awards of monies for grants and contracts under the Allied Health legislation include provision for hospitals to receive fair financial reimbursement for their clinical education costs.

We are pleased to note the proposed continuation of the Allied Health Traineeship program. Section 796 of the bill would authorize advanced training of allied health educators and of administrative and supervisory personnel in the allied health field. We feel that this type of student assistance is greatly needed to enhance both the quality of allied health education and the effectiveness of health delivery systems utilizing allied health personnel. Such training of needed teachers and administrators in the allied health field seems to us a very appropriate Federal function.

Section 798 of H.R. 9341 requires the Secretary of HEW to produce the same kind of statistics and report called for in Section 793 for Public and Community Health personnel. In addition, studies are called for to: identify the various types of allied health personnel; to determine the cost of training personnel in each classification; and deal with individual shortage issues. We agree that such studies are greatly needed and we wholeheartedly support this provision. However, I would again raise the issue of the need for adequate funding for the studies and reports required by Section 798, and suggest the possibility of a separate appropriation authorization for this purpose.

Mr. Chairman, the American Hospital Association strongly supports the programs covered by H.R. 9341 and urges a continued categorical federal role in the training of Public Health and Allied Health personnel. We request that our letter be made a part of the Committee's hearing record.

We are taking the liberty of furnishing a copy of this letter to each member of the Subcommittee.

Sincerely,

LEO J. GEHRIG, M.D.,  
Vice President.

AMERICAN NURSES' ASSOCIATION, INC.,  
 Kansas City, Mo., July 23, 1973.

HON. PAUL G. ROGERS,

*Chairman, Subcommittee on Public Health and Environment, House Committee on Interstate and Foreign Commerce, Rayburn House Office Building, Washington, D.C.*

DEAR MR. ROGERS: The American Nurses' Association strongly supports the intent of H.R. 9341 "Public and Allied Health Personnel Act of 1973."

Support to schools and to individuals needing financial assistance is an appropriate federal role at this time we feel because the personnel prepared in these programs are a national resource. The uneven distribution of programs, such as only 18 schools of public health, makes it inappropriate to require the state in which the schools are located to bear the total cost of operation. Also studies have shown that ours is a very mobile society and health workers therefore fit into that pattern. People educated in Georgia are likely to end up practicing in North Dakota, Kansas or any other state.

The Allied Health field is broad and often not clearly identified but the need for people with special preparation and skills in such fields as physiotherapy, dietetics and many others are well known by nurses. We value the contributions to patient care made by these specially prepared groups.

In the field of public or community health nurses have long been partners with the other groups of health personnel working to prevent illness, protect the health of communities and provide care for which they are especially qualified. We hope there continues to be active federal support for the type of interdisciplinary education provided by schools of public health as well as support to other institutions to prepare public health personnel in other schools such as nursing schools.

The language of H.R. 9341 is non-specific in terms of intended inclusion of various professions. We ask that you spell out the inclusion of professional nurses in the section of the bill dealing with public health training and the eligibility of schools of nursing both for public health traineeships and for institutional support such as project grants and contracts.

Also in the public health training portion of this bill (Sec. 790) we suggest that the terms health care be substituted for medical care to more fully describe the full range of services intended. And again research in "health" care seems more encompassing than "research in medical care development" (Sec. 790).

In the Allied Health portion of H.R. 9341 we question the definition of allied health personnel. It is very general, non-specific and depending on who makes the determination for inclusion or exclusion could conceivably be interpreted to include nurses, pharmacists, optometrists and so on. The phrase in question is (Sec. 794)(1) supporting, complementing or supplementing the professional functions of physicians, dentists and *other health professionals* in the delivery of health care to patients. We ask that nurses be specifically excluded from the Allied Health portion of H.R. 9341.

In recent years there have been some large scale federal programs launched to create new categories of health workers, often ending up preparing groups for very limited job opportunities or creating such fragmentation of care that those giving and those receiving it are very frustrated. In addition, although one purpose of creating the new workers was to lower health care costs to date this has not been demonstrated. In fact it may be increasing total costs of health services. We urge this committee to require through this legislation that adequate demonstration of need, demand and thorough evaluation of results on *quality of care* be required before such programs are implemented nationwide. Students coming into the health field are entitled to know that the education they are to receive has long term job opportunities and wide acceptance by employers, co-workers and recipients of their services. I know that many educators in the allied health field share these concerns.

There are some areas of concern to us in both the public health and allied health portions of the bill. Briefly stated these are:

(1) The apparent intent to have no outside-of-government review groups or councils to recommend action on applications. This puts government employees in the very difficult position of consulting, reviewing, recommending action and monitoring grants and contracts. In light of the current decentralization of programs and the apparent intention not to have well qualified educators knowledgeable in each of the areas of expertise located in each of the 10 regional offices it seems *especially* crucial now, if quality programming of these funds is intended, that outside experts recommend approval or disapproval of all applications for grants and also for contracts. The issue of peer review is clearly evident in this bill. We urge you to add the requirement of statutory bodies for this purpose.

(2) There are repeated indications that the Secretary of HEW will set standards for educational programs in order to determine eligibility. Is such a function appropriate? We think national accreditation is a better route to go to assure quality of educational programs. If this is to become a government function again many serious issues need to be carefully aired and clarified.

(3) The program evaluation reports required leave all determinations up to the Secretary. We feel that again the invaluable inclusion of a statutory body of experts such as has in the past been required (i.e. Program Review Committees) is desirable for these two important programs.

(4) The data to be developed and disseminated by the Secretary such as shortages and surpluses again seems to eliminate the current role of other groups such as professional associations, regional planning groups and regional education groups such as WICHE, SREB and NECHE. For two programs that the administration has consistently said there is not a need for federal support for it seems this might need to be carefully reassessed.

(5) As mentioned earlier the definitions in both portions of the bill we urge be made more explicit.

In closing we are pleased to see the Committee take action in bringing about a bill to continue support for such important health manpower programs. We hope our comments and identification of concerns is helpful to you as you consider H.R. 9341. If our staff can be helpful to you please contact our Washington office.

I ask that this statement be made part of the public record.

Sincerely yours,

ROSAMOND C. GABRIELSON, M.A., R.N.,  
President.

ASSOCIATION OF AMERICAN MEDICAL COLLEGES,  
Washington, D.C., August 8, 1973.

HON. PAUL G. ROGERS,  
*Chairman, Subcommittee on Public Health and Environment, Interstate and Foreign Commerce Committee, House of Representatives, Washington, D.C.*

DEAR MR. CHAIRMAN: The Association of American Medical Colleges notes with interest that the Subcommittee on Public Health and Environment is considering a bill to establish new programs of support for the training of public and community health personnel and allied health personnel. Because of its interest in the training of health personnel, health care delivery and the overall health of the nation, the Association would like to comment on certain portions of the proposed legislation, and we request that this letter be included as part of the record of the hearings.

The Association, now in its 97th year, represents the whole complex of persons and institutions charged with the undergraduate and graduate education of physicians. It serves as a national spokesman for all of the 114 operational U.S. medical schools and their students, 400 of the major teaching hospitals, and 51 learned academic societies, whose members are engaged in medical education and research. Through their departments of community or social medicine, medical schools are working to combine the principles of public health with those of clinical medicine to deal most effectively with the Nation's public health problems. The Association and its membership thus have a deep and direct involvement in the matters of concern to the Subcommittee.

The Association warmly endorses the Subcommittee's recognition that the provision of financial support to schools and individuals is an appropriate federal role, and would like to offer some suggestions to strengthen even further the bill's programs for training personnel to cope with our ever increasing community and public health needs. These suggestions are as follows:

1. *Definition.*—The Association suggests that the following provisions be added to section 790, which defines activities of public and community health personnel: "(5) the development of methods and/or systems which facilitate the integration of such personnel with community ambulatory health services, or (6) the development of evaluation mechanisms of community health services." The first of these provisions would help to narrow the existing gap between the programs of schools of public health and schools of medicine. The Association believes that improvement in the provision of primary care and community medicine may well come easier through collaboration and cooperation among the many and varied programs in these fields than through continued separation of programs. The second provision would subject the rendering of community health services to constant evaluation in order to measure achievement, identify areas for special emphasis and help to ensure the greatest possible success of these programs.

2. *Project grants and contracts.*—In subparagraphs (1), (2), and (8) of section 791A(a), the term "methods of" implies programs which study ways and means by which education could be developed, rather than the establishment of the educational programs themselves. Since the purpose of this assistance is, indeed, to develop programs for educating certain health personnel, rather than develop only techniques for teaching such personnel, the Association suggests that this term be changed to "programs."

In addition, the Association recommends adding after the term "medical care system" in subparagraph (4) the following: "; this includes training programs which are conducted in toto or in part in appropriate settings in foreign countries, provided that the training offered substantially adds to the overall objectives of the program." Under the auspices of PL 83-480, the United States cooperates in special scientific activities overseas, including collaborative programs in medical research and training. The purpose of these programs is to promote the mutual benefit of all parties involved. American medical students may participate in special ten-week fellowships in participating countries, and devote their time to special training and independent research and investigation to enable them to further broaden and enhance their medical education. The Association administers a fellowship program in Yugoslavian medical and public health schools. Recent experience indicates that almost all medical students participating in the Yugoslavian program wanted to choose projects in community health and health care delivery. The Association believes, therefore, that such a provision in the bill would strengthen the opportunity for American students to gain even greater knowledge and experience from their studies in international health.

3. *Eligible entities.*—The Association recommends that the language of section 791(A)(b)(2)(A) identifying entities eligible to receive project grants and contracts be amended to read as follows: "public or nonprofit private graduate schools or public health, hospital administration, or health planning, or other public or nonprofit private institutions providing graduate or specialized training in public or community health." This broader language would allow maximum utilization of the Nation's resources, including the Nation's medical schools, for training individuals in community and public health. Under existing authorities, American medical schools are responsible for training a large number of professionals who enter public health careers. The training of these individuals is essential because the number of graduates from the Nation's 18 schools of public health is not sufficient to deal with our growing public health needs. Unless the proposed legislation encompasses the activities of medical schools and their departments of community and social medicine, there will be no other source of funds specifically authorized for the training of individuals interested in community and social medicine in the setting of academic medical centers.

4. *Institutional grants.*—In order to promote collaboration between schools of public health and medicine to achieve maximum success in training public and community health personnel, the Association recommends that section 791B(a) be rewritten as follows: "For the purpose of supporting graduate educational programs for public and community health personnel and for the purpose of promoting the collaboration between schools of public health and schools of medicine or their appropriate departments for the development of programs in community health, the Secretary shall make grants to (A) public or nonprofit graduate schools of public health accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education, and (B) public or nonprofit private institutions providing graduate or specialized training in

public or community health, health administration, or health planning which have been accredited by a recognized body or bodies approved for such purpose by the Commissioner of Education."

The Association is concerned about the apparent power of the Secretary under section 791B(b)(4) to determine unilaterally the quality of programs for which applications are made. The Association believes that the use of existing national accreditation procedures is a far more appropriate mechanism for determining educational quality, and suggests that the Subcommittee modify this provision accordingly.

5. *Traineeships.*—The Association suggests that section 792(a) be amended as follows: delete everything after the term "unusual need," and insert thereafter, "including the training of individuals interested in combining their experience in health care and basic science with economics, social science, or systems engineering in health planning or public or community health services, and (2) make grants to public or nonprofit private institutions for traineeships to provide such training, including traineeships in international health, provided that the program emphasizes experience in community health as defined in section 790." This language would permit optimum utilization of qualified individuals in all aspects of community health problems.

6. *Statistics and reports.*—The Association is concerned that there is no provision in section 793 for utilizing the resources of outside planning, educational, or professional groups or associations in developing data on community or public health manpower needs and shortages. Where the Congress and the Administration are in disagreement over the needs for manpower in these areas, such independent outside data serve an important role. It is also advisable that such outside groups be involved in the preparation of the Secretary's report containing evaluations of and recommendations for program improvements, and the Association respectfully suggests that the Subcommittee consider the use of these nongovernmental resources.

7. *Peer review.*—Finally, the Association is deeply concerned over the lack of any outside nongovernmental review groups to recommend action on grant applications. We believe that peer review of such activities through national advisory councils of knowledgeable experts has proven itself a highly effective means of assuring efficient and effective use of federal funds. Because of the decentralization of HEW's regional offices, which will not be staffed by sufficient numbers of such experts, an independent peer review mechanism is essential for insuring maximum benefit from the federal investment, and should be provided for in this legislation.

Mr. Chairman, the Association thanks you for this opportunity to express its views. I and the staff of the Association stand ready to provide whatever assistance you might desire in this matter.

Yours truly,

JOHN A. D. COOPER, M.D.,  
*President.*

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NATIONAL ENVIRONMENTAL HEALTH ASSOCIATION,  
Denver, Colo., August 13, 1973.

Hon. PAUL G. ROGERS,  
*House of Representatives,*  
Washington, D.C.

DEAR CONGRESSMAN ROGERS: Thank you for giving the National Environmental Health Association the opportunity to present their views on H.R. 9341.

This bill is basically impractical since it provides for development, demonstration, study or experimentation projects in both public health and allied health sectors as well as traineeships, both at the graduate and undergraduate level, yet the period of the bill is one fiscal year expiring June 30, 1974. Projects of the type proposed cannot be initiated nor students recruited on a one year funding basis. Projects cannot be planned or developed in a year, much less demonstrated. In fact, most programs span a two or more year period and thus it would be an injustice to students to attempt to recruit them on a one year funding basis. The bill supersedes the current one year extension.

Subpart 1 provides for programs of support at the graduate level for schools of public health and other entities which basically do not affect current operations: project grants and contracts, institutional support and traineeships. Nowhere does this significantly change current programs.

Subpart 2, however, is critically different from the current extension of the allied health legislation. It provides for project grants and contracts and for advance traineeship support. There is no provision for on going institutional support so critical to keeping many allied health programs—including those for environmental health—going at a reasonably productive level. The definitions are extremely loose on the whole, since "other health professionals" is not defined and all allied health people consider themselves health professionals. The categories of "professionals" should be defined, i.e., physicians, dentists, veterinarians, podiatrists, optometrists, if this is what is meant. The problem is acute in Section 794(2). The term "environmental engineers" is fairly specific but what/who are the "other personnel"? It does not specify "professional personnel".

It is rather peculiar that the National Academy of Science would be specified as the agency to conduct the "study" or "studies" required of the secretary. There are other agencies including non-federal agencies who could be equally as good—or better. These are some of the things that should be considered:

1. The definitions should be clearer and "environmental engineer, sanitarian or other professional health environmentalists" should be specified. However, this creates a trap, for the sanitarian/environmentalist would then be a "professional" and ineligible for support under the Act. If sanitarians or other environmentalists are not included, the engineer is a professional and sanitarians and other environmentalists are not. Thus the concept of defining by describing the recipients is subject to being specious and intolerable as far as the Association is concerned.

2. Sustaining type support funds in institutional grants should be provided as in the past to keep programs viable on a firm footing after developmental support ceases and until schools or other resources can take over. There are a number of schools of allied health which are finding it difficult to keep going at a quality level and some environmental health programs particularly are feeling the strains of retrenchment.

3. The bill should cover a period of not less than three years and preferably five if it is to be effective.

In summary, as it now stands, the bill is not only infeasible of implementation but it is an affront to the health profession arbitrarily tagged with the term "allied". It is especially unacceptable to the membership as it now stands because of the ill-conceived approach to defining the profession in effect as masters and servants.

Attached are some specific word changes proposed for the bill. If the Association can be of any help at any time, please feel free to contact this office.

With best regards,

NICHOLAS POHLIT, M.P.H., R.S.,  
*Executive Director.*

Page 2:

Line 16 Change (2) to read "(2) research on medical care development, analysis of health statistics and other data, and environmental health factors and delivery systems."

Line 21 Change (4) to read "(4) the planning, development, and management of a healthful environment and the control of environmental health hazards."

Page 3:

Line 4 Change (1) to read "(1) methods of providing undergraduate and graduate education for personnel to be employed in public, community or environmental health activities."

Line 6, 9, 14, 20, and 23 Add the word environmental to reflect the broader term from public and community.

Page 4:

Line 8 Add environmental

Line 14 Change (A) to reflect the following: "(A) public or nonprofit private undergraduate or graduate schools of environmental health, hospital administrative . . . . . Entities granting undergraduate or graduate degrees in fields of public and community health; or"

Page 5:

Line 12 "undergraduate and graduate educational programs in environmental (public, community, occupational, institutional, etc.) health personnel, the secretary shall make grants to (A) public or nonprofit private undergraduate or graduate schools of environmental health accredited by . . ."

Page 6:

*Line 10* "will (1) in the case of programs in environmental health, complete the undergraduate or graduate educational requirements of the applicant . . ."

*Line 19* " . . . types of environmental health personnel; and"

Page 9:

*Line 24* " . . . respecting environmental health personnel . . . "

Page 10:

*Lines 2, 5, and 8* Change "public and community health personnel" to "environmental health personnel"

Page 11 :

*Line 11* Change to read " . . . or (2) assisting sanitarians, environmental engineers, and other personnel in environmental health management and control activities."

[Whereupon, at 3:36 p.m., the subcommittee adjourned.]

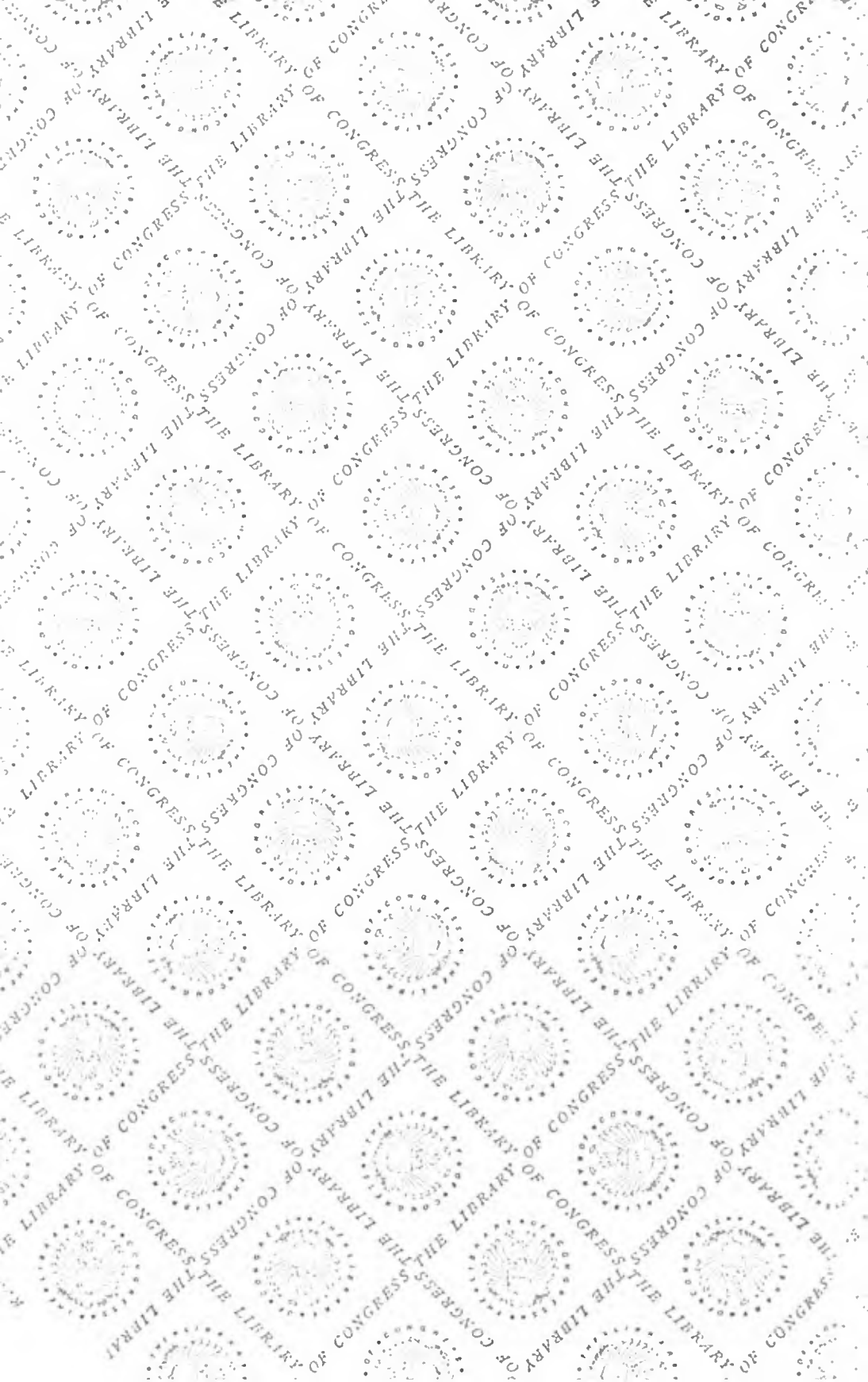
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